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Washington, Tuesday, April 23, 1940

The President

SWEDEN—SUSPENSION OF TONNAGE DUTIES BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

WHEREAS section 4228 of the Revised Statutes of the United States, as amended by the act of July 24, 1897, c. 13, 30 Stat. 214 (U.S.C., title 46, sec. 141), provides, in part, as follows:

"Upon satisfactory proof being given to the President, by the government of any foreign nation, that no discriminating duties of tonnage or imposts are imposed or levied in the ports of such nation upon vessels wholly belonging to citizens of the United States, or upon the produce, manufactures, or merchandise imported in the same from the United States or from any foreign country, the President may issue his proclamation, declaring that the foreign discriminating duties of tonnage and impost within the United States are suspended and discontinued, so far as respects the vessels of such foreign nation, and the produce, manufactures, or merchandise imported into the United States from such foreign nation, or from any other foreign country; the suspension to take effect from the time of such notification being given to the President, and to continue so long as the reciprocal exemption of vessels, belonging to citizens of the United States, and their cargoes, shall be continued, and no longer * * *";

AND WHEREAS satisfactory proof has been received by me from the Government of Sweden that no discriminating duties of tonnage or imposts are imposed or levied in the ports of Sweden upon vessels wholly belonging to citizens of the United States, or upon the produce, manufactures, or merchandise imported in such vessels, from the United States, or from any foreign country:

NOW, THEREFORE, I, Franklin D. Roosevelt, President of the United States

of America, by virtue of the authority vested in me by the above-quoted statutory provisions, do hereby declare and proclaim that the foreign discriminating duties of tonnage and imposts within the United States are suspended and discontinued so far as respects the vessels of Sweden and the produce, manufactures, or merchandise imported in said vessels into the United States from Sweden or from any other foreign country; the suspension to take effect from the date of this proclamation, and to continue so long as the reciprocal exemption of vessels belonging to citizens of the United States and their cargoes shall be continued, and no longer.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the United States of America to be affixed.

DONE at the City of Washington this 18th day of April in the year of our Lord nineteen hundred and forty, and [SEAL] of the Independence of the United States of America the one hundred and sixty-fourth.

FRANKLIN D. ROOSEVELT

By the President:

CORDELL HULL
Secretary of State.

[No. 2397]

[F. R. Doc. 40-1586; Filed, April 20, 1940;
11:31 a. m.]

Rules, Regulations, Orders

TITLE 29—LABOR

CHAPTER V—WAGE AND HOUR DIVISION

PART 511—INDUSTRY COMMITTEE REGULATIONS AMENDMENT

The following amendment to Regulations, Part 511 as amended (Regulations Applicable to Industry Committees Issued Pursuant to section 5 of the Fair

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Labor Standards Act), is hereby issued. This amendment amending § 511.22 as amended shall become effective upon my

signing the original and upon the publication thereof in the FEDERAL REGISTER, and shall be in force and effect until repealed by regulations hereafter made and published.

Signed at Washington, D. C., this 20th day of April 1940.

PHILIP B. FLEMING,
Colonel, Corps of Engineers.
Administrator.

§ 511.22¹ *End of committee's function.*
After an industry committee has submitted a report, as provided in § 511.19 hereof, it shall cease to perform any further functions until reconvened by the Administrator: *Provided, however,* That the Administrator may dissolve the committee after he has acted upon its recommendations.

[F. R. Doc. 40-1599; Filed, April 22, 1940; 11:29 a. m.]

TITLE 31—MONEY AND FINANCE: TREASURY

CHAPTER I—MONETARY OFFICES

GENERAL RULING No. 1 UNDER EXECUTIVE ORDER No. 8389, APRIL 10, 1940, AND REGULATIONS ISSUED PURSUANT THERETO, RELATING TO TRANSACTIONS IN FOREIGN EXCHANGE, ETC.

REGULATIONS NOT APPLICABLE TO ICELAND

The Secretary of State has advised me as follows:

"Denmark and Iceland are two separate political entities. Acting under the authority of a provision of the Icelandic Constitution the Icelandic Parliament has within the past few days passed a resolution stating that since the King of Iceland is not now in a position to carry out his Constitutional duties with respect to Iceland, the Icelandic Government has assumed for the time being the exercise of the Royal prerogatives and the entire control of Icelandic foreign relations.

"In view of the foregoing it would not appear that Iceland falls within the definition of the term 'Denmark' in Section 11 of the above-mentioned Executive Order."

In view of the foregoing, the Treasury Department construes the term "Denmark" as used in the above-mentioned Executive Order and Regulations² as not applying to Iceland.

[SEAL] H. MORGENTHAU, Jr.,
Secretary of the Treasury.

APRIL 15, 1940.

[F. R. Doc. 40-1590; Filed, April 22, 1940; 9:52 a. m.]

¹ 5 F.R. 2104.
² 5 F.R. 1401.

GENERAL RULING No. 2 UNDER EXECUTIVE ORDER No. 8389, APRIL 10, 1940, AND REGULATIONS ISSUED PURSUANT THERETO, RELATING TO TRANSACTIONS IN FOREIGN EXCHANGE, ETC.

TRANSACTIONS PROHIBITED, EXCEPT UNDER LICENSE

Inquiry has been made as to whether the following are prohibited by the Executive Order and the Regulations issued thereunder except under license:

(a) The transfer by a banking institution within the United States of stock certificates from or into the names of "nationals" of Norway or Denmark; and

(b) The delivery out of custody accounts or the receipt in custody accounts, by a banking institution within the United States, of securities held or to be held in custody for "nationals" of Norway or Denmark.

The Treasury Department construes the Executive Order and Regulations¹ as prohibiting such transactions, except under license.

[SEAL] H. MORGENTHAU, Jr.,
Secretary of the Treasury.

APRIL 19, 1940.

[F. R. Doc. 40-1591; Filed, April 22, 1940; 9:52 a. m.]

TITLE 36—PARKS AND FORESTS

CHAPTER I—NATIONAL PARK SERVICE

OLYMPIC NATIONAL PARK

SUBSIDIARY REGULATIONS

Pursuant to the authority granted to the Secretary of the Interior by the Act of August 25, 1916 (39 Stat. 535, 16 U.S.C. 3), and pursuant to the authority granted to the Director of the National Park Service by the Rules and Regulations issued thereunder (1 F.R. 672; 36 CFR, Chapter I, Part 2), the following subsidiary regulations are prescribed for Olympic National Park, to become effective immediately:

§ 20.31 *Olympic National Park—(a) Fishing; open season.* (1) The open season in park streams shall conform with the season established by the State Game Commission for State streams.

(2) The open season in park lakes, except Lake Crescent, shall be from July 1 to September 30, inclusive. The open season in Lake Crescent shall be from May 1 to October 31, inclusive.

(3) The following rivers, but not their tributaries, are open to fishing at any time of the year:

Hoh River.
Queets River.

¹ 5 F.R. 1401.

Soleduck River.

Quinault River—the main stream and the east fork as far as Graves Creek.

(4) Steelhead fishing within the park shall conform with the open season, limit of catch, and other regulations established by the State Game Commission for streams outside the park but heading in the park.

(b) *Fishing; bait.* (1) Fishing with any gear or tackle having more than two spinners, spoons, blades, flashers, rudders, or like attractions, is prohibited in all waters except Lake Crescent.

(2) The placing or depositing of fish eggs, fish roe, or other substances in any waters for the purpose of attracting, collecting, or feeding fish, is prohibited.

(c) *Fishing; limit of catch and in possession.* (1) The limit of catch per person per day of all species other than steelhead shall be 10 fish, or 10 pounds and one fish.

(2) Possession of more than one day's catch limit by any person at any one time is prohibited.

(3) Dolly Varden trout shall be considered a game fish and when caught must be retained as part of the catch.

(d) *Fishing license.* The park as such does not charge for fishing, but persons fishing in the park must first obtain fishing licenses as required by the State of Washington.

Approved, April 16, 1940.

[SEAL] ARNO B. CAMMERER,
Director.

[F. R. Doc. 40-1582; Filed, April 20, 1940;
9:27 a. m.]

SEQUOIA NATIONAL PARK

AMENDMENTS TO SUBSIDIARY REGULATIONS

Pursuant to the authority granted to the Secretary of the Interior by the Act of August 25, 1916 (39 Stat. 535, 16 U.S.C. 3), and pursuant to the authority granted to the Director of the National Park Service by the Rules and Regulations issued thereunder (1 F.R. 672), paragraphs (d), (f) and (g) of § 20.8, Part 20, Title 36, Code of Federal Regulations, are hereby amended to read as follows:

§ 20.8 Sequoia National Park—

(d) *Fishing; closed waters.* The following waters are closed to fishing to act as holding ponds and feeder streams for restocking main waters:

(1) On the watershed of the North Fork of the Kaweah River—

Cabin Creek from source to junction with Dorst Creek.

(2) On the watershed of the Marble Fork of the Kaweah River—

Deer Creek from the foot bridge on the Sunset-Village Trail to the source.

Silliman Creek from source at Silliman Lake to Bridge on the Generals Highway.

Wolverton Creek above the Wolverton Dam where signs are posted.

(3) On the watershed of the Middle Fork of the Kaweah River—

Crescent Meadow Creek from source to the High Sierra Trail Bridge at Lower Crescent Meadow.

(f) *Fishing; open season.* May 1 to October 31, inclusive.

(g) *Fishing; limit of catch and in possession.* (1) The limit of catch shall be 15 fish per person per day, or 7 pounds and one fish.

(2) Possession of more than one day's catch limit by any person at any one time is prohibited.

Approved, April 16, 1940.

[SEAL] ARNO B. CAMMERER,
Director.

[F. R. Doc. 40-1583; Filed, April 20, 1940;
9:27 a. m.]

TITLE 43—PUBLIC LANDS: INTERIOR

CHAPTER II—BUREAU OF
RECLAMATIONLOWER YELLOWSTONE PROJECT, MONTANA-
NORTH DAKOTA

WITHDRAWAL FOR COMMUNITY SITE

FEBRUARY 26, 1940.

The SECRETARY OF THE INTERIOR.

(Through the Commissioner of the
General Land Office)

SIR: The act of October 5, 1914 (38 Stat. 727), authorized the Secretary of the Interior to withdraw certain lands from other disposition and reserve for county parks, public playgrounds, and community centers for the use of residents under the reclamation projects, authorized by the act of June 17, 1902 (32 Stat. 388).

The Project Manager of the Board of Control, operating the Lower Yellowstone Project, Montana-North Dakota, under contract with the Secretary of the Interior, has requested the reservation as a community center of a five-acre tract of land located in the SE¼ of lot 4, Sec. 18,

T. 151 N., R. 104 W., 5th P. M., North Dakota. It is understood that the National Youth Administration in conjunction with the Yellowstone Township are to landscape the tract and construct a community hall thereon for the use of the settlers on the Yellowstone Project, Montana-North Dakota.

It is therefore recommended that the following described land, now withdrawn under the act of June 17, 1902 (32 Stat. 388), for the Yellowstone Project, Montana-North Dakota, be withdrawn from other disposition and reserved for public park and community center under the provisions and conditions of the act of October 5, 1914 (38 Stat. 727).

Lower Yellowstone Project, Montana-North Dakota Fifth Principal Meridian, North Dakota

Township 151 North, Range 104 West, Section 18, that portion described as follows: "A parcel of land containing five (5.0) acres more or less, lying and being in Lot four (4), Section eighteen (18), Township one hundred fifty-one (151) North, Range one hundred four (104) West, 5th P. M., McKenzie County, North Dakota, more particularly described as follows: Beginning at the south east corner of Lot four (4), thence westerly on the south line of Lot four (4) two hundred seventy-five (275) feet, thence northerly and parallel to the east line of Lot four (4) eight hundred sixty (860) feet intersecting Lateral P right of way, thence south seventy-five degrees and forty minutes east (S 75°40' E) ten (10) feet, thence south fifty-four degrees and twenty-two minutes east (S 54°22' E) three hundred thirty (330) feet, thence southerly on the east line of Lot four (4) six hundred sixty-five (665) feet to the point of beginning."

Respectfully,

JOHN C. PAGE,
Commissioner.

I concur, March 26, 1940.

FRED W. JOHNSON,
Commissioner of the General Land
Office.

The foregoing recommendation is hereby approved, and it is so ordered. The Commissioner of the General Land Office is hereby authorized and directed to cause the records of his office and the local land office to be noted accordingly.

A. J. WIRTZ,
Under Secretary.

APRIL 9, 1940.

[F. R. Doc. 40-1584; Filed, April 20, 1940;
9:27 a. m.]

TITLE 49—TRANSPORTATION AND RAILROADS

CHAPTER I—INTERSTATE COMMERCE COMMISSION

[Ex Parte No. M.C.—13¹]

MOTOR CARRIER SAFETY REGULATIONS

IN THE MATTER OF REGULATIONS GOVERNING THE TRANSPORTATION OF EXPLOSIVES AND OTHER DANGEROUS ARTICLES BY MOTOR VEHICLE

Submitted November 22, 1938; Decided April 1, 1940

1. Rules and regulations governing the transportation of explosives or other dangerous articles in or on motor vehicles by common or contract carriers prescribed.

2. Application of rules and regulations prescribed in Ex Parte No. M.C.—4 Motor Carrier Safety Regulations, 1 M.C.C. 1, 10 M.C.C. 533, and 14 M.C.C. 669 extended, without exception, to all contract carriers by motor vehicle, subject in any degree to the Motor Carrier Act, 1935, to the extent that such carriers transport explosives or other dangerous articles.

3. In Ex Parte No. M.C.—2 *Maximum Hours of Service of Motor Carrier Employees*, 3 M.C.C. 665, 6 M.C.C. 557, and 11 M.C.C. 203 and in Ex Parte No. M.C.—4 *Motor Carrier Safety Regulations*, 1 M.C.C. 1, 10 M.C.C. 533, and 14 M.C.C. 669, orders prescribing certain regulations under authority of Motor Carrier Act, 1935, vacated insofar as they make such regulations applicable to common carriers engaged in the transportation of explosives or other dangerous articles in motor vehicles and said regulations readopted and again prescribed, under authority of the Transportation of Explosives Act, as to all such carriers so engaged.

4. In No. 3666, *Regulations for Transportation of Explosives*, order of November 6, 1934, and the amending orders of March 12, 1936, Aug. 27, 1936, October 19, 1936, and Dec. 14, 1936, vacated insofar as they prescribe pursuant to the Transportation of Explosives Act, regulations governing the transportation of explosives or other dangerous articles on public highways by motor truck, or other vehicle.

R. W. Snow for the Bureau of Motor Carriers, Interstate Commerce Commission; J. Ninian Beall, E. M. Berol, Earl Bray, E. L. Connelly, Fayette B. Dow, Wm. C. Klebenow, J. D. Lawson, W. M. McFarland, Roland Rice, A. H. Roehling, Martin Sack, Orville A. Schulenberg, David G. Shearer, Harold S. Shertz, Roy B. Thompson, Dabney T. Waring, and Karl L. Wilson for various motor car-

riers and parties supporting carriers; H. L. Armstrong, Harold Bates, C. E. Cadieux, L. C. Davidson, Roy F. Fike, H. R. Gillespie, A. C. Holmes, J. E. Johnson, J. R. Lewallen, P. J. Patten, H. W. Roe, J. R. Sewell, H. Emerson Thomas, A. F. Winn, and L. W. Witte for petroleum producing, refining, and marketing companies; George H. Barber, Glenn O. Carter, R. C. Coleman, Rainey DeBoice, R. Eksergian, Ed. H. Gill, Edw. J. Gresslin, R. C. Jordan, Paul F. Lewis, H. W. MacArthur, F. G. Moore, J. L. Roberts, Mark M. Twohig, and A. D. Whittimore for various other shippers; Thomas P. O'Brien, Fred A. Tobin and Charles F. Herling for other interested parties; Robert T. Baldwin, Frederick E. Brown, Maurice F. Crass, John J. Crowe, Frank R. Fetherston, C. H. Fleming, H. J. Gronemeyer, F. T. Ridley, and Robert M. Searls for technical associations; Wm. T. Butler for Bureau of Marine Inspection and Navigation, Department of Commerce; Wilbur LaRoe, Jr., for The Port of New York Authority; W. S. Topping and H. A. Campbell for Bureau of Explosives. John E. McCullough for Kansas Corporation Commission.

Report of the Commission

By the Commission:

By an order dated August 21, 1936, on its own motion under section 204 (a), paragraphs (1) and (2) of the Motor Carrier Act, 1935, division 5, entered upon an investigation, Ex Parte No. M.C.—4, into the matter of the qualifications of employees and safety of operation and equipment of common and contract carriers by motor vehicle subject to that act and particularly into the matter of: (1) the qualification of drivers, (2) driving of motor vehicles, (3) parts and accessories necessary to safe operation, and (4) the reporting of accidents. The report of division 5 in that proceeding, *Motor Carrier Safety Regulations*, 1 M.C.C. 1, outlined a "connected" and "long term program" for the promotion of safety operations and promulgated regulations in four parts, covering respectively each of the four phases of the subject specifically enumerated in the order instituting the investigation. These regulations were made effective as of July 1, 1937, except those relating to the reporting of accidents which were made effective as of April 1, 1937. For reasons stated in the report cited, they were not, however, made applicable to the operations of motor carriers otherwise exempt under section 203 (b) of the act, nor to private carriers by motor vehicle which were the subject of a separate investigation, Ex Parte No. M.C.—3. Though they were applied, so far as they went, to vehicles transporting explosives or other dangerous articles, they did not purport adequately to cover that field and the report specifically reserved that subject for further study, concerning which, it spoke as follows:

"Also in the rules as to 'driving of motor vehicles' special reference is made to vehicles transporting inflammable liquids and gases in connection with the requirement for full stops at railroad crossings, and for the emergency warnings for disabled vehicles. These two items are manifestly only a small part of any complete regulations governing the safe transportation of hazardous cargoes, and their inclusion in the present rules is only incidental to the general problems under consideration. Common carriers by motor truck are now subject to the 'Regulations for the Transportation of Explosives and Other Dangerous Articles on Public Highways by Motor Truck or Other Vehicle, Prescribed Under the Act of March 4, 1921', of the Commission, effective March 1, 1935. It has been deemed best, however, not to extend to contract carriers the application of these regulations concerning transportation of explosives and other dangerous articles without further consideration of the problems involved, and accordingly the matter will be given early attention for the purpose of arriving at uniform regulations covering this special subject for all motor carriers."

The operations of carriers otherwise exempt under section 203 (b) were subsequently considered in a separate report on further hearing and the regulations made applicable to some of them and not to others, *Motor Carrier Safety Regulations—Exemptions*, 10 M.C.C. 533. In Ex Parte No. M.C.—2 *Maximum Hours of Service of Motor Carrier Employees*, 11 M.C.C. 203, regulations governing hours of service designated "Motor Carrier Safety Regulations, Part 5" were added and in *Motor Carrier Safety Regulations, Revised*, 14 M.C.C. 669, the previously promulgated regulations, except Part 5, were revised somewhat and in furtherance of our continuing program, Part 6, relating to *Inspection and Maintenance* was added.

We have, now, reached for consideration, the subject of special regulations governing the transportation by motor carriers of explosives or other dangerous articles. Consistently with the above-quoted excerpt from *Motor Carrier Safety Regulations*, 1 M.C.C. 1, the title proceeding herein, Ex Parte No. M.C.—13 is a general investigation pursuant to sections 204 (a), paragraphs (1), (2), and (3) of the Motor Carrier Act, 1935, and the Transportation of Explosives Act, approved March 4, 1921, instituted on our own motion, by an order of June 14, 1937, into:

(a) The matter of the modification of regulations prescribed November 6, 1934, under the Transportation of Explosives Act, insofar as such regulations pertain to qualifications and maximum hours of service of employees and safety of operation and equipment by common carriers by motor vehicle;

(b) The matter of the establishment of reasonable requirements governing

¹This report also embraces Ex Parte No. M.C.—2 *Maximum Hours of Service of Motor Carrier Employees*, Ex Parte No. M.C.—4 *Motor Carrier Safety Regulations* and, No. 3666, *Regulations for the Transportation of Explosives*, to the extent that it deals with common carriers by motor vehicle now subject to the Motor Carrier Act, 1935.

the transportation of explosives and other dangerous articles by contract carriers by motor vehicle in interstate or foreign commerce;

(c) The need for the establishment, and if need therefor be found, the establishment of requirements governing the transportation of explosives and other dangerous articles by private carriers by motor vehicle in interstate or foreign commerce.

In furtherance of this investigation about 1,500 copies of a proposed draft of regulations were mailed on or about July 10, 1937, to all industries which had manifested an interest; to common, contract, and private motor carriers; to all State regulatory commissions; to all State motor vehicle administrators; to various Federal Government agencies; to bus and truck associations; to chambers of commerce; and to others, and criticisms and comments thereon were solicited. About 40 or 50 replies were received, many of which represented the collective comments of groups or associations. They were annotated and formed the basis for a second proposed draft, about 2,000 copies of which were mailed on January 31, 1938, to recipients of the first draft and others who had manifested an interest in the subject. Comments and criticisms on this draft also were solicited, in response to which between 60 and 70 replies were received. They were much more extensive than those in connection with the first draft and were annotated in the same manner.

Following the issuance of the second proposed draft, conferences were held with representatives of the following associations: National Truck Tank Association, National Film Carriers Association, Institute of Makers of Explosives, Bureau of Explosives, Manufacturing Chemists' Association, and Compressed Gas Manufacturers' Association. Conferences were also had with members of the staffs of the Division of Labor Standards, the Department of Commerce, and officials of labor organizations.

Representatives of shippers, manufacturers, carriers, labor, Federal and State governmental agencies, many of whom were technologists, were also invited to attend conferences at which each of the several categories into which the proposed regulations were divided, was discussed. On January 21, 1938, and March 23, 1938, the section dealing with "Inflammable Liquids" was discussed. Starting with March 21, 1938 and continuing through March 25, 1938, each of the several sections was separately discussed at a series of conferences held at the offices of the Section of Safety of the Bureau of Motor Carriers at which were in attendance upwards of 150 persons. The numbers attending on the various days ranged from 30 to 50. Throughout the course of preparation of our successive proposals there were frequent interviews with informed persons, both at our offices and in the field.

Upon the basis of information thus received as a result of the described conferences, criticisms, comments, and interviews a third draft of proposed regulations was prepared and distributed as had been the earlier draft. This third draft was then made the subject of formal hearings at Los Angeles, Calif., at Tulsa, Okla., and at Washington, D. C. These hearings were attended by carriers, by representatives of associations of carriers and others, of other government bureaus, of State regulatory commissions, and by others. Much useful information and testimony has thus been received on all phases of the proposed regulations, all of which has been carefully weighed in reaching our conclusions herein.

As early as 1908 Congress, recognizing the inherent hazards in the transportation of explosives enacted the Transportation of Explosives Act, under the authority of which this Commission originally promulgated the regulations governing the transportation of explosives by rail common carriers only. Since that time other legislation has been enacted recognizing the hazards in the transportation of other dangerous articles, under which regulations have been issued from time to time, until, in 1934 this Commission first issued regulations governing the transportation of explosives and other dangerous articles by motor truck or other vehicle on the public highways.

The regulations herein prescribed will replace and supersede these present regulations, in part only, as hereinafter explained. They will be designated Part 7 of our Motor Carrier Safety Regulations and will constitute another link in our "connected" or "long term program." For reasons, shortly to be stated, they will be promulgated and prescribed as to certain carriers under the authority of the Motor Carrier Act, 1935, and as to others under the authority of the Transportation of Explosives Act. The two acts differ from one another both as respects the type of carrier to which they are applicable and as respects the penalties provided for violation. The Transportation of Explosives Act applies to the operations of all common carriers; the Motor Carrier Act authorizes us to establish reasonable requirements with respect to safety of operation of common and contract carriers by motor vehicle and, if need therefor be found, to private carriers. The present Motor Carrier Safety Regulations, Revised, and those prescribed herein apply alike to the operations of both common and contract carriers by motor vehicle. Violation of the Transportation of Explosives Act, or any regulation thereunder, is a felony, for which the penalty is a fine of not more than \$2,000 or imprisonment for not more than eighteen months or both, except that when death or bodily injury of any person results from any willful violation, the guilty person may be fined

not more than \$10,000 or imprisoned for not more than ten years or both. (U.S.C., Title 18, Sections 385 and 386). Violation of regulations promulgated under the Motor Carrier Act is a misdemeanor, for which a fine only is the penalty. (Section 222 of the Motor Carrier Act, 1935).

Thus, though we may have authority to promulgate the considered new regulations, insofar as they apply to common carriers by motor vehicle subject to both the Motor Carrier Act, 1935 and the Transportation of Explosives Act, under the joint authority of both such acts, it is obviously impractical so to do. Were they to be established under such joint authority, it would be impossible in any enforcement proceeding to classify a violation as of one act or the other and consequently impossible to fix the penalty.

Since the Transportation of Explosives Act covers specifically a single subject, which is one of many covered by the Motor Carrier Act, we think it clear that as to such subject it should take precedence and that so far as they properly may be, the considered regulations should be promulgated and prescribed under the Transportation of Explosives Act. Accordingly, these regulations in so far as they relate to common carriers by motor vehicle subject to both the Transportation of Explosives Act and the Motor Carrier Act, 1935, will be prescribed and promulgated under the former act. As to all other carriers subject thereto they will be prescribed and promulgated under the Motor Carrier Act, 1935. We appreciate, of course, that as between common and contract carriers by motor vehicle this results in unequal penalties for the identical violation but the matter is one for the consideration of Congress rather than a matter within our discretion.

Regulations in General

The regulations prescribed herein are divided into seven sections, viz, General, Explosives, Inflammable Liquids, Inflammable solids and oxidizing Materials, Corrosive Liquids, Compressed Gases, and Poisons. The nature of articles included within each such classification, follows closely the categories contained in the present highway and railway regulations established under the authority of the Transportation of Explosives Act.

The decimal system of designating rules has been employed throughout, including the appendices which contain specifications, charts, tables, etc. The numbering of each appendix or part thereof is such as to make clear that section of the body of the regulations to which, particularly, it forms an appendix.

The "General" section treats of those matters which are of general application to the transportation of all of the classes of articles covered by the succeeding sections, and the latter contain the requirements deemed by us to be necessary

for the safe transportation of articles categorically defined and described therein. A loading table is appended which indicates those articles which are not authorized to be transported with certain other articles. Specifications for cargo tanks for the transportation of inflammable liquids, corrosive liquids, liquefied petroleum gases, and certain poisonous liquids are also contained in appendices attached to and forming a part of the regulations. Other self-explanatory charts and tables pertaining to various other subjects are appended.

In general, each of the several sections of the regulations contains a number of sub-sections or divisions devoted successively to definitions, application of rules, vehicular tunnels, compliance, packing requirements, marking of vehicles, shipping papers, loading and unloading, driving, handling and disposition of leaking or damaged containers, parking in congested places, certain elements in the design and construction of motor vehicles (and various appurtenances), inspection and maintenance of vehicles, the care to be taken in the event of accident, and others. However, the treatment of these subjects in each section varies as indicated by the particular circumstances.

Supplementing the definitions contained in the regulations there will be found attached thereto, as a part thereof, lists of explosives and other dangerous articles. These lists will include many of the commonly transported explosives and other dangerous articles, with the proper shipping name of each given article or class of articles, listed both alphabetically and by classes, containing information as to: forbidden articles, articles exempt from regulation under certain circumstances, prescribed labels, markings, packing and containers; all in correspondence with the present regulations of the Commission established for shippers of such articles, under authority of the Transportation of Explosives Act. Many articles are listed with "n. o. s." (not otherwise specified) designations. Whether or not such articles are subject to regulation depends upon whether or not, in each several instance, they fall within the terms of the definitions in the regulations for each such class of article.

The regulations for shippers of the Commission, from which the lists were prepared, are now undergoing revision in the course of which some changes may be made in the present lists. When and if this is done the new lists may be substituted by us for those now used if need therefor appears.

Motor carriers will be required by the prescribed regulations to obtain certification from shippers that explosives or other dangerous articles offered for transportation are properly described, marked, labeled, and packed in accordance with our requirements governing motor carriers and they may not transport any such articles unless so certified. Corresponding packing and certification

requirements may be incorporated in common carriers' tariffs or in the case of contract carriers in their contracts with shippers.

Shipping papers are also required specifically to show certain prescribed descriptive information, in connection with any shipment of any commodity or class or articles included in the lists of explosives and other dangerous articles appended to the regulations.

The Regulations herein promulgated permit the transportation of explosives, except liquid nitroglycerin, in semitrailers but prohibit such transportation in any full trailer. They also prohibit the transportation of explosives in any truck or in any semitrailer having any form of trailer attached even though the attached trailer may be empty or loaded with non-explosives. In so doing they follow our decision in *Regulations for Transportation of Explosives*, 211 I.C.C. 351 wherein we denied a petition seeking a modification of the present common carrier regulations so as to permit the transportation of explosives in trucks and attached full trailers.

Specifications for tank motor vehicles and cargo tanks used for the transportation of inflammable liquids, corrosive liquids, inflammable compressed gases, and other articles covered by these regulations, are contained in appendices to the prescribed regulations and form a part thereof. They include certain requirements as to thickness of shell and bulkhead metal, capacity of compartments, and accessories, in addition to general requirements as to workmanship, but do not include the basic requirements as to stiffness, strength, and stability of the shell, allowable stresses of materials, or such other basic design characteristics. Complete data for the formulation of such requirements are not before us. The Section of Safety of the Bureau of Motor Carriers has initiated further investigations into these subjects, which will involve correlation of data now obtainable with the results of experimental work to be done. This will probably require some time to complete. When it is finished, consideration will be given to any amendment of the present regulations affecting such matters which may then appear desirable.

Insufficient data are available for the formulation of specifications for cargo tanks for the transportation of non-liquefied compressed gases, particularly those having high service pressures such as hydrogen, helium, oxygen, and others. Similarly, information is lacking concerning specifications for liquefied compressed gases other than liquefied petroleum gases. Some testimony was introduced concerning specifications for cargo tanks for the transportation of liquefied carbon dioxide but it was not such as would permit the formulation of suitable cargo tank specifications. No information was available as to the demand in the industry for cargo tanks for the transportation of non-liquefied com-

pressed gases, although there does appear to be a demand for the transportation of liquefied carbon dioxide in cargo tanks. Opportunity will be afforded carriers and shippers to introduce evidence as to the need for specifications for such cargo tanks, if need there be, at hearings to be held in Docket 3666 in the near future.

Applicability of Regulations

In general. These rules and regulations shall apply to the operations and equipment of every common carrier by motor vehicle and every contract carrier by motor vehicle, without exception or exemption, to the extent that any such carrier engages in and while he or it is engaged in the transportation in interstate or foreign commerce of any explosive or other dangerous article in or on any motor vehicle. However, it is not intended that these regulations shall apply to that portion of any such carrier's operations not involved in the transportation of explosives or other dangerous articles or to any equipment of any such carrier not actually so engaged.

Private carriers. The regulations heretofore prescribed Parts 1 to 6, do not apply to private carriers. Whether or to what extent, if at all, they should be so applied is the subject of a special inquiry, Ex Parte No. MC-3, now pending. While the order instituting that investigation is broad enough to include private carriers of explosives and other dangerous articles we do not propose in view of the technicality of the subject to treat it there. Instead, the record in the title proceeding herein has been developed with a view to handling it here and it will be our purpose, as soon as practicable, to issue a supplemental proposed report herein covering the subject. Accordingly, private carriers will not for the present be covered by the regulations herein prescribed.

Carriers otherwise exempt under section 203 (b). Those parts of our Motor Carrier Safety Regulations, Revised, now in effect are applicable to all common carriers by motor vehicle and all contract carriers by motor vehicle except certain of those exempted by section 203 (b) of the Motor Carrier Act. The draft of tentative regulations which furnished the basis for the hearings in this proceeding proposed the requirement that the applicability of the general regulations already in effect, as well as the special and additional requirements of the regulations prescribed herein, be extended to cover or include, without any exception whatever, the operations of all common carriers and contract carriers by motor vehicle to the extent that they engage in the transportation of other dangerous articles or actually transport explosives. Much testimony was offered tending strongly to support this proposal.

The transportation of explosives or of any article, classifiable under the proposed regulations as "dangerous", pos-

sesses some inherent hazard either as to fire, explosion, or other danger to life, limb, or property. Much of such transportation will involve interline movements over different types of carriers, including carriers by motor vehicle, rail, or water. It is desirable by means of the regulations herein prescribed, which are calculated to insure cautious and judicious handling by motor vehicle, to contribute also to safe transportation by any connecting carrier. The importance of this matter will be apparent when it is recalled that articles covered by these regulations frequently move in large volume only short distances by motor vehicle prior to or following interchange with some other carrier in the course of a longer interline movement.

Moreover, substantial benefits will undoubtedly accrue if these regulations are made applicable to all classes of common carriers and contract carriers by motor vehicle operating in interstate or foreign commerce, through the tendency such application will have to standardize methods of handling throughout the country. The desirability of such standardization is self-evident. That there is a divergence as to methods required to be employed by carriers, together with a lack, in many States, of adequate provisions governing the transportation of articles covered by these regulations, is definitely established.

In view of these facts and circumstances, we believe it desirable to extend the applicability of Parts 1, 2, 3, 4, and 6 of our Motor Carrier Safety Regulations, Revised, to cover without exception, the operations of all common carriers by motor vehicles and all contract carriers by motor vehicle subject to the Motor Carrier Act, but only to the extent they engage in or while they are engaged in, the transportation of explosives or other dangerous articles in interstate or foreign commerce. Part 5 of our existing regulations already applies without exception to the operations of all common carriers and contract carriers subject to the Motor Carrier Act, 1935.

To this end the regulations herein prescribed provide:

"These rules and regulations shall apply to the operations and equipment of every common carrier by motor vehicle and every contract carrier by motor vehicle, without exception or exemption, to the extent that any such carrier engages in and while he or it is engaged in the transportation in interstate or foreign commerce of any explosive or other dangerous article in or on any motor vehicle; and in addition, Parts 1, 2, 3, 4, 5, and 6 of the Motor Carrier Safety Regulations, Revised, shall apply in like manner to any such carrier."

Though the previously prescribed regulations were prescribed only under authority of the Motor Carrier Act, 1935, their incorporation by reference in the

regulations herein prescribed is seemingly effective (1) to extend their application to carriers previously exempted insofar as they engage in the transportation of explosives or other dangerous articles and (2) as a repromulgation of the previously prescribed regulations, as to common carriers under authority of the Transportation of Explosives Act rather than the Motor Carrier Act, 1935. However, to avoid confusion and conflicting penalties for violations we shall vacate our prior orders insofar as they promulgate and prescribe the present Motor Carrier Safety Regulations Parts 1, 2, 3, 4, 5, and 6 as to common carriers while engaged in and to the extent they engage in the transportation in motor vehicles of explosives and other dangerous articles and repromulgate and prescribe these same regulations as to common carriers while so engaged under authority of the Transportation of Explosives Act.

Carriers of passengers. Though, from the very nature of this subject matter, the regulations herein prescribed pertain in the main, to the operations of common carriers and contract carriers of property, we deem it wise to make appropriate provisions concerning the transportation of explosives and other dangerous articles on motor vehicles carrying passengers. Certain provisions of the Transportation of Explosives Act pertain to the transportation of explosives on the vehicles of common carriers of passengers. Some of them prohibit the transportation of certain explosives, under any circumstances, by any common carrier of either property or passengers; others prescribe limitations both as to the articles transported and the conditions under which they may be transported. The regulations herein prescribed are in accordance with these prohibitions and limitations, and, in addition, various other limitations are prescribed where transportation with passengers is involved. We believe these further limitations to be justified for the protection of the passengers in such cases.

Intrastate operations. The present regulations prescribed under authority of the Transportation of Explosives Act, effective March 1, 1935, apply to transportation by common carriers only but consistently with the purpose of the legislation as reflected in its legislative history and for the purpose of fully protecting interstate commerce, they have been applied to all of the operations of any carrier subject thereto, including intrastate as well as the interstate operations in transportation of explosives or other dangerous articles. The question is thus suggested whether the regulations herein prescribed should be made applicable, as the present regulations are, to the transportation in intrastate commerce of explosives or other dangerous articles by motor carriers, common or contract, having operations in interstate or foreign commerce subject to the Motor Carrier Act. With-

out considering our authority so to apply them to others than common carriers subject to the Transportation of Explosives Act, we are not convinced that present circumstances require it, nor are we now equipped or prepared to undertake the administrative burden which would be entailed. In general, we have received active cooperation from the various State regulatory bodies having authority to promulgate similar regulations. Some of them are awaiting our action in this matter with a view to promulgating substantially similar or identical regulations governing operations subject to their jurisdiction. Others will no doubt do likewise since the desirability of uniform regulations is patent.

Common carriers by motor vehicle not subject to the Motor Carrier Act, 1935. Certain common carriers by motor vehicle or certain motor carrier operations, by reason of the fact that they are subject to Part I of the Interstate Commerce Act are not subject to Part II, the Motor Carrier Act, 1935. Nevertheless these carriers or motor vehicle operations to the extent they engage in, or involve, the transportation in motor vehicles of explosives or other dangerous articles being common carrier operations will be subject to the regulations herein prescribed under authority of the Transportation of Explosives Act. The carriers or operations which we have in mind are: (1) Railroads, railway express companies, or water carriers (the latter only as to traffic the subject of a joint rail-water movement) performing their own pick-up-and-delivery service or independent carriers employed by them to perform such service and (2) operations of express companies in connection with transportation by air.

Public highways. By the Transportation of Explosives Act we are authorized to prescribe regulations governing the transportation by common carriers of explosives or other dangerous articles "on land or sea" without limitation. Similarly our authority in the promulgation of safety regulations under the Motor Carrier Act, 1935 is not restricted to transportation over public highways. Thus our authority under both acts extends to any transportation in interstate or foreign commerce. Our past regulations under the Transportation of Explosives Act have covered only transportation "on public highways".

From a practical standpoint any movement in interstate or foreign commerce over a private way would almost certainly precede or follow a movement over a public highway and be virtually a part of or incident thereto in the same sense as loading or unloading is deemed part of transportation. Obviously the public safety is almost as much concerned with these movements over private ways as with the following or preceding movement over a public highway. Consequently the regulations herein prescribed will not be restricted to transportation over public highways but will cover such

transportation in interstate or foreign commerce, wherever performed.

"Other vehicles". The present regulations under the Transportation of Explosives Act cover transportation by motor truck "or other vehicle." The Bureau of Explosives has advised us that they know of no horse drawn or other vehicles than motor vehicles now engaged in the transportation of explosives or other dangerous articles in interstate or foreign commerce. We know of none such and the regulations herein promulgated under the Transportation of Explosives Act will cover only transportation by motor vehicle. Since the Motor Carrier Act covers only transportation by motor vehicle, this question does not arise in connection with the regulations established thereunder. Should need therefor appear in the future we will give consideration to the extension of the application of these regulations to vehicles other than motor vehicles, if any, so engaged.

Findings

On all the facts before us we find that the hazards inherent in the transportation in interstate or foreign commerce, in or on any motor vehicle, of any explosive or other dangerous article, by any common carrier whatever, or by any contract carrier by motor vehicle subject to the Motor Carrier Act, 1935, require the promulgation and prescription of special rules, regulations, and requirements for, and to promote, safety of operation and equipment of, such carriers so engaged.

We further find that the rules and regulations, attached to and made a part of the accompanying order, denominated "Motor Carrier Safety Regulations, Revised, Part 7, Transportation of Explosives and Other Dangerous Articles" are just and reasonable rules, regulations, and requirements for application to the transportation, in interstate or foreign commerce, of explosives or other dangerous articles, in or on motor vehicles, by common carriers generally and by contract carriers by motor vehicle subject to the Motor Carrier Act, 1935, and that such rules, regulations, and requirements will further and promote safety of operation and equipment of such carriers by motor vehicle so engaged and will be in the interest of public welfare and safety, and should be promulgated and prescribed by us for regulation of the operations, in interstate or foreign commerce, of all such common carriers and all such contract carriers so engaged and their equipment.

We further find the previously promulgated and prescribed rules, regulations, and requirements of this Commission, denominated "Motor Carrier Safety Regulations, Revised," Parts 1 to 4 (both inclusive) and Part 6, are just and reasonable requirements, the application of which if extended to cover, without any exception or exemption, the operations and equipment of all common carriers whatsoever and all contract carriers by

motor vehicle subject to the Motor Carrier Act, 1935, to the extent that they engage in, and while engaged in, the transportation in interstate or foreign commerce of explosives or other dangerous articles in or on any motor vehicle, would further and promote safety of operation and equipment of such carriers while so engaged, and will be in the interest of public welfare and safety, and that the application of such previously promulgated and prescribed rules, regulations, and requirements should be so extended.

An appropriate order will be entered. We shall also vacate the order of November 6, 1934, in No. 3666, *Regulations for the Transportation of Explosives*, and amending orders of March 12, 1936, August 27, 1936, October 19, 1936, and December 14, 1936, in the same proceeding insofar as they promulgate and prescribe regulations governing the transportation of explosives or other dangerous articles by motor truck or other vehicle.

Commissioner Mahaffie did not participate in the disposition of this matter.

[Ex Parte No. M.C.-13]

MOTOR CARRIER SAFETY REGULATIONS

ORDER IN THE MATTER OF REGULATIONS GOVERNING THE TRANSPORTATION OF EXPLOSIVES AND OTHER DANGEROUS ARTICLES BY MOTOR VEHICLE

[Ex Parte No. M.C.-4]

MOTOR CARRIER SAFETY REGULATIONS, REVISED

ORDER IN THE MATTER OF QUALIFICATIONS OF EMPLOYEES AND SAFETY OF OPERATION AND EQUIPMENT OF COMMON CARRIERS AND CONTRACT CARRIERS BY MOTOR VEHICLE

[No. 3666]

ORDER IN THE MATTER OF REGULATIONS FOR THE TRANSPORTATION OF EXPLOSIVES AND OTHER DANGEROUS ARTICLES

At a general session of the Interstate Commerce Commission, held at its office in Washington, D. C., on the first day of April, A. D. 1940.

It appearing, That under authority of and pursuant to section 233 of the Transportation of Explosives Act approved March 4, 1921 (41 Stat. Large 1444), this Commission by Division 6, by order dated November 6, 1934, in Docket No. 3666, prescribed regulations entitled "Regulations for the Transportation of Explosives and Other Dangerous Articles on Public Highways by Motor Truck or Other Vehicle", governing the transportation of explosives and other dangerous articles on public highways by motor truck or other vehicle, which regulations have been modified and supplemented by orders of March 12, 1936, August 27, 1936, October 19, 1936, and December 14, 1936 in the same proceedings;

It further appearing, That by an order dated July 30, 1936, this Commission, by Division 5, in Ex Parte No. M.C.-2 pur-

suant to section 204 (a) subparagraphs (1) and (2) of the Motor Carrier Act, 1935, entered upon an investigation into the maximum hours of service of employees of all common and contract carriers by motor vehicle of passengers or property in interstate or foreign commerce;

It further appearing, That by an order dated August 21, 1936, in Ex Parte No. M.C.-4 this Commission by Division 5, pursuant to section 204 (a) paragraphs (1) and (2) of the Motor Carrier Act, 1935, entered upon an investigation into the matter of the qualifications of employees of common and contract carriers by motor vehicle subject to said act, and into the matter of the safety of operation and equipment of said carriers;

It further appearing, That by an order dated June 14, 1937, in Ex Parte No. M.C.-13 we entered upon an investigation with respect to (1) the modification of the regulations so prescribed November 6, 1934, in Docket No. 3666 under authority of the Transportation of Explosives Act, insofar as such regulations pertain to qualifications and maximum hours of service of employees and safety of operation and equipment of common carriers by motor vehicle, in interstate or foreign commerce, and (2) the establishment of reasonable requirements governing the transportation of explosives and other dangerous articles by contract carriers by motor vehicle in interstate or foreign commerce;

It further appearing, That by an order dated January 27, 1939, in Ex Parte No. M.C.-2 under authority of the Motor Carrier Act, 1935, we adopted and prescribed rules and regulations governing hours of service of employees of motor carriers entitled "Motor Carrier Safety Regulations, Revised, Part 5, Hours of Service of Drivers" to be observed by common and contract carriers by motor vehicle subject to the said Motor Carrier Act, 1935;

It further appearing, That by an order dated May 27, 1939, in Ex Parte No. M.C.-4, *Motor Carrier Safety Regulations, Revised*, this Commission by Division 5, under authority of the Motor Carrier Act, 1935, approved, adopted, and prescribed certain rules and regulations entitled "Motor Carrier Safety Regulations, Revised" Parts 1, 2, 3, 4, and 6 to be observed by common carriers by motor vehicle and contract carriers by motor vehicle subject to the said Motor Carrier Act, 1935, except those engaged in the transportation of passengers or property in interstate or foreign commerce wholly within a municipality or between contiguous municipalities or within a zone adjacent to and commercially a part of any such municipality or municipalities, and excepting also the casual, occasional, or reciprocal transportation of passengers or property in interstate or foreign commerce for compensation by any person not engaged in transportation by motor

vehicle as a regular occupation or business;

And it further appearing, That a full investigation of the matters and things involved in these proceedings has been made, and that this Commission on the date hereof has made and filed a report containing its findings of fact and conclusions thereon, and has found therein that the special rules, regulations, and requirements appended hereto, denominated "Motor Carrier Safety Regulations, Revised, Part 7" are just and reasonable for application to the transportation of explosives or other dangerous articles in or on motor vehicles and such as would, if prescribed for the regulation thereof promote safety of operation and equipment of both common and contract carriers by motor vehicle engaged in such transportation.

It is ordered, in Ex Parte No. M.C.-13, under the authority of the Transportation of Explosives Act, that the rules, regulations, and requirements, attached to and made a part hereof, entitled "Motor Carrier Safety Regulations, Revised, Part 7, Transportation of Explosives and Other Dangerous Articles" be and they are hereby approved, adopted, and prescribed for application on and after the effective date of this order, to the operations and equipment of, and to be observed by, all common carriers without exception or exemption to the extent that they collectively or individually engage in, and while engaged in, the transportation in interstate or foreign commerce, of any explosive or other dangerous article, in or on any motor vehicle.

It is further ordered, in Ex Parte No. M.C.-13, under authority of the Motor Carrier Act, 1935, that the rules, regulations, and requirements, attached hereto and hereby made a part hereof, entitled "Motor Carrier Safety Regulations, Revised, Part 7, Transportation of Explosives and Other Dangerous Articles" be and they are hereby approved, adopted, and prescribed for application on and after the effective date of this order to the operations and equipment of, and to be observed by all contract carriers by motor vehicle which are subject to the Motor Carrier Act, 1935, without any exception or exemption, to the extent that such carriers individually or collectively engaged in and while engaged in, the transportation in interstate or foreign commerce, of any explosive or other dangerous article, in or on any motor vehicle as defined in said Motor Carrier Act, 1935.

It is further ordered, That the order by Division 5, in Ex Parte No. M.C.-4, Motor Carrier Safety Regulations, dated May 27, 1939, be, and it is hereby modified and amended, and the rules and regulations therein approved and prescribed entitled "Motor Carrier Safety Regulations, Revised, Parts 1 to 4, (both inclusive) and Part 6", under authority

of the Motor Carrier Act, 1935, be and they are hereby approved, adopted, and prescribed for application, on and after the effective date of this order, to, and their application on and after such date is hereby extended to, the operation and equipment of, and they shall be observed by, all contract carriers by motor vehicle which are subject to the Motor Carrier Act, 1935, without any of the exceptions heretofore provided in the said order of Division 5, dated May 27, 1939, to the extent that any such carrier or carriers are engaged in, and while engaged in, the transportation, in interstate or foreign commerce of any explosive or any other dangerous article, in or on any motor vehicle, as defined in said Motor Carrier Act, 1935.

It is further ordered, That the order by Division 5 in Ex Parte No. M.C.-4 Motor Carrier Safety Regulations, dated May 27, 1939, and issued under the authority of the Motor Carrier Act, 1935, in so far as it makes the regulations therein approved and prescribed applicable to common carriers while engaged in the transportation of explosives and other dangerous articles, in or on any motor vehicle, be, and it is hereby vacated and set aside and, under authority of the Transportation of Explosives Act, the said regulations, entitled "Motor Carrier Safety Regulations, Revised, Parts 1, 2, 3, 4, and 6 be and they are hereby approved, adopted, and prescribed for application, on and after the effective date of this order, to the operations and equipment of, and they shall be observed by, all common carriers, without any exception or exemption whatever, to the extent that such carriers engage in, or any such carrier engages in, and while engaged in, the transportation, in interstate or foreign commerce of any explosive or any other dangerous article, in or on any motor vehicle.

It is further ordered, That our order of January 27, 1939, in Ex Parte No. M.C.-2 Maximum Hours of Service of Motor Carrier Employees, issued under authority of the Motor Carrier Act, 1935, in so far as it makes the regulations therein approved, adopted, and prescribed applicable to common carriers while engaged in the transportation of explosives or other dangerous articles in or on any motor vehicle, be and it is hereby vacated and set aside as of the effective date of this order and under authority of the Transportation of Explosives Act, the said regulations, entitled "Motor Carrier Safety Regulations, Part 5, Hours of Service of Drivers" be and they are hereby approved, adopted, and prescribed, for application on and after the effective date of this order, to the operations and equipment of, and they shall be observed by, all common carriers, without any exception or exemption, to the extent that such carriers engage in, or any such carrier engages in, and while en-

gaged in, the transportation in interstate or foreign commerce of any explosive or other dangerous article, in or on any motor vehicle.

It is further ordered, in No. 3666, that said order of November 6, 1934, by Division 6 promulgating and prescribing "Regulations for the Transportation of Explosives and Other Dangerous Articles on Public Highways by Motor Truck or Other Vehicle", and the orders of March 12, 1936, August 27, 1936, October 19, 1936 and December 14, 1936 in the same proceeding insofar as they promulgated and prescribed regulations governing the transportation of explosives or other dangerous articles by motor truck or other vehicle, be and they are hereby vacated and set aside as of the effective date of this order.

And it is further ordered, That this order shall be effective June 15, 1940.

By the Commission.

[SEAL]

W. P. BARTEL,
Secretary.

Note

The rules which follow are classified as to six main classes of articles, following a general section applicable to all of these classes. The purpose of this arrangement is to enable carriers of each main class of commodities to find, conveniently grouped, all of the special rules applicable to them. Thus, carriers of inflammable liquids will find the rules applicable to their operations in the first section (indexed under 7.1 and Appendix 7.1) and the third section (under 7.3 and Appendix 7.3); carriers of compressed gases will find them in the first section (7.1 and Appendix 7.1) and the sixth section (7.6 and Appendix 7.6); and so on. This will also facilitate reprinting of the various sections of the rules according to special commodities by motor carrier organizations, trade associations, or others.

It will be observed that duplication of numerous individual rules in various sections has been made necessary by this arrangement.

The comments above apply only to the special rules contained in Part 7 of the Motor Carrier Safety Regulations, Revised. The provisions of Parts 1 to 6 inclusive of these regulations are also applicable to motor carriers.

PART 7—MOTOR CARRIER SAFETY REGULATIONS, REVISED

Regulations prescribed under authority of the Motor Carrier Act, 1935, particularly section 204 (a), (1) and (2), and under the Transportation of Explosives Act of March 4, 1921, with respect to the transportation of explosives and other dangerous articles by motor vehicles operated in interstate or foreign commerce by common carriers and contract carriers. Regulations effective June 15, 1940.

Arrangement of Rules

	7.1 General	7.2 Explosives	7.3 Inflammable liquids	7.4 Inflammable solids and oxidizing materials	7.5 Corrosive liquids	7.6 Compressed gases	7.7 Poisons
Definitions.....	7.100	7.200	7.300	7.400	7.500	7.600	7.700
Application of rules.....	7.101	7.201	7.301	7.401	7.501	7.601	7.701
Vehicular tunnels.....	7.102	7.202	7.302	7.402	7.502	7.602	7.702
Compliance required.....	7.103	7.203	7.303	7.403	7.503	7.603	7.703
Packages.....	7.104	7.204	7.304	7.404	7.504	7.604	7.704
Marking on motor vehicles.....	7.105	7.205	7.305	7.405	7.505	7.605	7.705
Shipping papers.....	7.106	7.206	7.306	7.406	7.506	7.606	7.706
Loading and unloading.....	7.107	7.207	7.307	7.407	7.507	7.607	7.707
Driving.....	7.108	7.208	7.308	7.408	7.508	7.608	7.708
Handling and disposition of leaking containers.....	7.109	7.209	7.309	7.409	7.509	7.609	7.709
Parking in congested places.....	7.110	7.210	7.310	7.410	7.510	7.610	7.710
Design and construction.....	7.111	7.211	7.311	7.411	7.511	7.611	7.711
Inspection and maintenance.....	7.112	7.212	7.312	7.412	7.512	7.612	7.712
Accidents.....	7.113	7.213	7.313	7.413	7.513	7.613	7.713

SECTION 7.1—GENERAL
ARRANGEMENT OF RULES

Rule	
7.100	Definitions.
7.1001	Tank motor vehicle.
7.1002	In bulk.
7.1003	Any other term.
7.101	Application of rules.
7.102	Vehicular tunnels.
7.103	Compliance required.
7.104	Packages.
7.1041	Leaking packages.
7.1042	Certification of packages.
7.1043	Marking of packages according to type of service.
7.105	Marking on motor vehicles.
7.1051	Tank motor vehicles.
7.1052	Motor vehicles other than tank motor vehicles.
7.1053	Exceptions as to quantity limitations.
7.1054	Removal of signs or lettering.
7.1055	Only one marking required.
7.1056	When signs or markings not required.
7.106	Shipping papers.
7.107	Loading and unloading.
7.1071	Allowable loading combinations.
7.1072	Precautions while loading or unloading.
7.1073	Explosives or other dangerous articles on buses.
7.108	Driving.
7.1081	Motor vehicles not to be left unattended.
7.109	Handling and disposition of containers found leaking in transit.
7.1091	Repairing.
7.1092	Transportation.
7.1093	Disposition of unsafe broken packages.
7.110	Parking in congested places.
7.111	Design and construction.
7.1111	Wheels and tires.
7.1112	Electric lights on all motor vehicles.
7.1113	Fuel feed system.
7.1114	Exhaust system.
7.1115	Brakes on all motor vehicles.
7.112	Inspection and maintenance.
7.113	Accidents.

7.100 *Definitions.* As used in these regulations:

7.1001 *Tank motor vehicle.* The term "tank motor vehicle" means any motor vehicle designed or used for the transportation of liquids or gases covered by these regulations in any cargo tank. The term includes any motor vehicle while being used for the transportation of any tank container or containers.

7.1002 *In bulk.* The term "in bulk," as applied to any dangerous article other than explosives means the transportation of any such materials in a motor vehicle when such materials are not packed in individual packages.

7.1003 *Any other term.* Any other term used in these regulations is used in its commonly accepted meaning except where such other term has been defined elsewhere in this part or under the General Definitions of the Motor Carrier Safety Regulations, Revised, or in section 203 (a) of the Motor Carrier Act, 1935.*

7.101 *Application of rules.* These rules and regulations shall apply to the operations and equipment of every common carrier by motor vehicle and every contract carrier by motor vehicle, without exception or exemption, to the extent that any such carrier engages in and while he or it is engaged in the transportation in interstate or foreign commerce of any explosive or other dangerous article in or on any motor vehicle; and in addition, Parts 1, 2, 3, 4, 5, and 6 of the Motor Carrier Safety Regulations, Revised, shall apply in like manner to any such carrier.

7.102 *Vehicular tunnels.* Nothing contained in these regulations shall be so construed as to nullify or supersede regulations established and published under authority of State statute or municipal ordinance regarding the kind, character, or quantity of any explosive or other dangerous article permitted by such regulations to be transported through any urban vehicular tunnel used for mass transportation.

7.103 *Compliance required.* Every motor carrier and his or its officers, agents, employees, and representatives concerned with the transportation of explosives or other dangerous articles by motor vehicle, shall comply with the regulations prescribed herein, and shall become conversant therewith; and, to this end, each motor carrier shall instruct such persons.

7.104 *Packages:*

7.1041 *Leaking packages.* No container containing any explosive or other dangerous article may be accepted for transportation or transported by a motor carrier if it is in a leaking condition, or in such a condition as to make leakage

probable during transit, except as prescribed in or under Rules 7.109, 7.209, 7.309, 7.409, 7.509, 7.609, and 7.709 of these regulations for the disposition or transportation of containers containing explosives and other dangerous articles found to be leaking subsequent to the commencement of transportation thereof.³

7.1042 *Certification of packages.* Except as provided hereinbelow, no motor carrier may accept for transportation or transport any explosive or other dangerous article unless it be certified to him by the shipper on the manifest, memorandum receipt, bill of lading, shipping order, shipping paper or other memorandum as follows:

"This is to certify that the above articles are properly described by name and are packed and marked and are in proper condition for transportation according to the regulations prescribed by the Interstate Commerce Commission."

Listed in Table 7.1-3 of Appendix 7.1 are certain exemptions from this requirement. Whenever the transportation of any explosive or other dangerous article is to be exclusively by motor vehicle between points between which the articles are not to be transferred from one motor carrier to another, in either truckload or less-than-truckload lots, the individual packages need not be marked with the consignee's name and address.

7.1043 *Packages in good condition.* No provision of Rule 7.1042 shall be so construed as to authorize the transportation or acceptance for transportation by any motor carrier of any package containing any explosive or other dangerous article which is in leaking or otherwise apparent improper condition for safe transportation.

7.1044 *Explosives or other dangerous articles not acceptable for transportation.* No motor carrier may accept for transportation or transport any explosive or other dangerous article listed in Table 7.1-3 of Appendix 7.1 as forbidden for transportation by all motor carriers; nor, if there be any prohibition or limitation regarding the transportation of any particular explosive or other dangerous article by a particular kind of motor carrier, may any such article be accepted for transportation or transported by that kind of carrier, except as indicated in Table 7.1-3.

7.105 *Marking on motor vehicles.*

7.1051 *Tank motor vehicles.* See Rules 7.3051, 7.5051, 7.6051, and 7.7051.

7.1052 *Motor vehicles other than tank motor vehicles.* Except as provided in Rule 7.1053, requiring certain markings without regard to the quantity of articles being transported, every motor vehicle

³ Attention is here directed to the fact that the provisions of these regulations with respect to the transportation of containers containing any explosive or other dangerous article are made concerning transportation by land highway and are subject to further limitation with respect to transportation by water, especially of leaking containers.

*For additional definitions see "General Definitions" and definitions in each succeeding section of these regulations.

other than a tank motor vehicle transporting twenty-five hundred pounds (2,500 lbs.) or more of any one class of explosives or other dangerous articles, or transporting an aggregate of five thousand (5,000 lbs.) or more of more than one class of such articles, in the event the lading does not contain twenty-five hundred pounds (2,500 lbs.) of any one class, shall be marked as prescribed in the following list:

Dangerous explosives—the words "Explosives."

Less dangerous explosives—the word "Inflammable."

Inflammable liquids—the word "Inflammable."

Corrosive liquid, acid—the word "Acid."

Corrosive liquid other than acid—the words "Corrosive Liquid."

Compressed gas other than chlorine—the words "Compressed Gas."

Chlorine—the word "Chlorine."

Poison gas—the words "Poison Gas."

Tear gas—the words "Tear Gas."

Articles classified as poisons other than poison gas or tear gas—the word "Poison."

The prescribed markings shall be by means of signs or lettering on each side and the rear of the motor vehicle, and the letters shall be at least three inches (3") high on a background of sharply contrasting color.

7.1053 Exceptions to quantity limitations. When any quantity whatever of any dangerous explosive, any poison gas, any tear gas, or any chlorine is being transported on any motor vehicle, such motor vehicle shall be marked with the markings prescribed in Rule 7.1052.

7.1054 Removal of signs or lettering. Every sign or lettering required by Rule 7.1052 or 7.1053 shall be removed from or covered on any motor vehicle to which it is attached or affixed when such motor vehicle is not transporting the article for which the sign is appropriate, except that no such sign or lettering is required to be removed or covered when such motor vehicle is used exclusively in the transportation of any article for which the sign or lettering is appropriate.

7.1055 Only one marking required. Whenever any motor vehicle is transporting more than one class of dangerous article for which signs are required to be lettered on or affixed to any such motor vehicle, no more than one kind of sign need be displayed. The sign used shall be the one which in the judgment of the motor carrier, designates the most dangerous article being transported.

7.1056 When signs or markings not required. No signs or markings concerning explosives or other dangerous articles other than those specifically required by these regulations need be attached to or affixed on any motor vehicle.

7.106 Shipping papers. Every driver of a motor vehicle transporting explosives or other dangerous articles shall

have in his possession a manifest, memorandum receipt, bill of lading, shipping order, shipping paper, or other memorandum setting forth the following information for each class of such article being transported: the classification or name; the total quantity by weight, volume, or otherwise as appropriate, of each kind of explosive or other dangerous article; the label required for the outside container of each class of such article, if a label is required; and the marking on each kind of package for which no label is required, such as "No Label Required", "Low Explosives", "Fireworks", "High Explosives", etc., as appropriate in each instance. If the information herein required is not furnished by the shipper, it shall be supplied by the carrier.

7.107 Loading and unloading.

7.1071 Allowable loading combinations. In any singly driven motor vehicle or in any single unit of a combination of motor vehicles, explosives and other dangerous articles shall be loaded together only if permitted by Table 7.1-3 of Appendix 7.1 of these regulations. This rule shall not be so construed as to forbid the carrying of emergency flares (pot torches) and fuses on motor vehicles used for the transportation of dangerous articles other than inflammable liquids or inflammable compressed gases in cargo tanks; nor as to forbid the use of well protected and properly installed accessories for operation such as fuel in fuel tanks or other fuel containers, storage or other electric battery or batteries used in the operation of the motor vehicles.

7.1072 Precaution while loading and unloading. No explosive or other dangerous article shall be loaded into or on, or unloaded from, any motor vehicle unless the handbrake be securely set and all other reasonable precautions be taken to prevent motion of the motor vehicle during such loading or unloading process.

7.1073 Explosives or other dangerous articles on buses.

7.10731 Transportation of dangerous articles other than explosives not authorized on buses when other practicable means are available. No dangerous article other than explosives is authorized by these regulations to be transported on a motor vehicle transporting passengers except where no other practicable means of transportation of such articles is available. This shall not be construed as prohibiting the emergency transportation of drugs, chemicals, or hospital supplies on motor vehicles transporting passengers when the transportation of such supplies is surrounded by the precautions set forth in these regulations, nor as to prohibit the transportation of military or naval forces with their accompanying munitions of war on passenger-carrying or other motor vehicles.

7.10732 Explosives on buses. No explosives except small arms ammunition

is authorized by these regulations to be transported on a motor vehicle transporting passengers except where no other practicable means of transportation of such explosives is available. No explosive listed in Table 7.1-3 as forbidden for transportation or acceptance by any motor carrier or for transportation on any bus may be loaded into or transported on any bus. No explosive except small arms ammunition may be carried in the passenger-carrying space of any motor vehicle transporting passengers. Not to exceed one hundred pounds (100 lbs.) gross weight of any or all of the following kinds of explosives may be transported on a motor vehicle transporting passengers: primers; fuses, not including detonating fuses; fireworks, not including any kind of fireworks classed as a dangerous explosive, Class A. Samples of explosives for laboratory examination, not exceeding a net weight of one-half pound ($\frac{1}{2}$ lb.) each, and not exceeding twenty (20) samples at one time in a single motor vehicle, may be transported in a motor vehicle transporting passengers. Small arms ammunition may be transported without limitation as to quantity in a motor vehicle transporting passengers. No provision of this rule shall be so construed as to prohibit the transportation of military or naval forces with their accompanying munitions of war on passenger-carrying or other motor vehicles.

7.10733 Dangerous articles other than explosives on buses. The gross weight of any given class of dangerous article other than explosives shall not exceed 100 pounds, and the aggregate weight of all such other dangerous articles shall not exceed 500 pounds on any motor vehicle transporting passengers, and all such other dangerous articles shall be loaded into a space other than that provided for passengers: *Provided, however,* That certain non-toxic and non-inflammable refrigerants such as and including carbon dioxide, dichlorodifluoromethane, dichloromonofluoromethane, dichlorotetrafluoroethane, dichloromethane, or trichloromonofluoromethane, may be transported in a cylinder the weight of which may not exceed 250 pounds gross weight, when such refrigerant is used in the servicing operations of a motor carrier on whose motor vehicles one or any of these refrigerants are used; and any such cylinder shall, while being transported, be secured against movements while in transit.

7.10734 Poisons on busses. No "extremely dangerous poison—Class A", "tear gas or irritating substance—Class C", liquid "less dangerous poison—Class B" nor any paranitraniline may be loaded into or transported on any motor vehicle transporting passengers.

7.10735 Explosives and other dangerous articles on pole trailers. No explosive or other dangerous article may be loaded into or on or transported in or on any pole trailer.

7.10736 Other rules applicable. None of the provisions under Rule 7.1073 re-

garding any of the classes of explosives or other dangerous articles allowable to be transported in any motor vehicle transporting passengers shall be construed as relaxing in any degree any other requirement in these regulations.

7.108 Driving.

7.1081 *Motor vehicles not to be left unattended.* In addition to the requirements set forth in Rule 2.15 of Part 2 of these regulations, no motor vehicle transporting any explosive or other dangerous article shall be left unattended upon any public street or highway except when the driver is engaged in the performance of normal operations incident to his duties as the operator of the vehicle to which he is assigned.

7.109 *Handling and disposition of containers found leaking in transit.* When leaks occur in packages or containers during the course of transportation, subsequent to initial loading, disposition of such package or container shall be made by the safest practical means afforded under Rules 7.1091, 7.1092 and 7.1093.

7.1091 *Repairing.* Packages may be repaired when safe and practicable, such repairing to be in accordance with the best and safest practice known and available.

7.1092 *Transportation.* Any package repaired in accordance with the requirements of Rule 7.1091, except as provided in Rule 7.20921, 7.30912, 7.3092, 7.5091 (a) and (b), and 7.5092, may be transported to the nearest place at which it may safely be disposed of only in compliance with the following requirements:

(a) The package must be safe for transportation.

(b) The repair of the package must be adequate to prevent contamination of or hazardous admixture with other loading transported on the same motor vehicle therewith.

(c) If the carrier is not himself the shipper, the consignee's name and address must be plainly marked on the repaired package.

7.1093 *Disposition of unsafe broken packages.* In the event any leaking package or container cannot be safely and adequately repaired for transportation or transported, it shall be stored pending proper disposition in the safest and most expeditious manner possible.

7.110 *Parking in congested places.* No general rule.

7.111 *Design and construction of motor vehicles transporting explosives or other dangerous articles.*

7.1111 *Wheels and tires.* Every motor vehicle other than a semitrailer or pole trailer shall be equipped with at least two axles upon which shall be mounted at least four wheels. All of the road wheels on every motor vehicle shall be equipped with pneumatic rubber tires.

7.1112 *Electric lights on all motor vehicles.* No motor vehicle shall be equipped with any other kind of arti-

ficial lighting devices than electric, the wiring of which shall comply with the requirements of Rule 3.413 of these regulations.

7.1113 *Fuel feed system.* All portions of the fuel feed system, including carburetor, pumps, and all auxiliary mechanisms and connections, shall be constructed and installed in a workmanlike manner, and so constructed and located as to minimize the fire hazard, with no readily combustible materials used therein, and shall, except for Diesel fuel connections, be well separated from the engine exhaust system. A pressure release device shall be provided where necessary. The fuel feed lines shall be made of material not adversely affected by the fuel to be used or by other materials likely to be encountered, of adequate strength for their purpose, well secured to avoid chafing or undue vibration, having a readily accessible and reliable shut-off valve or stop cock, and having no soldered joints at or near the engine or its accessories.

7.11131 *Fill pipe away from exhaust system.* The fill pipe or fill connection of any fuel tank, tanks, or other containers shall be so located and arranged that fuel will not be spilled on any portion of the exhaust system in the event of overflow during the filling process.

7.11132 *Carburetor.* The carburetor, if used, shall be so constructed and installed as to minimize the hazards due to backfiring, and other hazards inherent in its use, and shall be provided with direct drainage for overflow gasoline.

7.1114 *Exhaust system.* All parts of the motor vehicle exhaust system shall be constructed and installed in a workmanlike manner, in no case exposed to accumulations of grease, oils, gasoline, or other fuels. In engine installations using gasoline or like liquid fuels, butane, propane, mixtures thereof, or similar fuels, the exhaust system shall have ample clearance from fuel lines, and in any case, from other combustible materials. A muffler cut-out or equivalent device shall not be installed.

7.1115 *Brakes on all motor vehicles.* Every motor vehicle of whatever kind shall be equipped with brakes on all wheels.

7.112 *Inspection and maintenance.* See Part 6 of the Motor Carrier Safety Regulations, Revised, of the Commission.

7.113 *Accidents.* No general rule.

SECTION 7.2—EXPLOSIVES

ARRANGEMENT OF RULES

Rule	
7.200	Definitions.
7.2001	Dangerous explosives—Class A.
7.2002	Less dangerous explosives—Class B.
7.2003	Relatively safe explosives—Class C.
7.201	Application of rules.
7.202	Vehicular tunnels.
7.203	Compliance required.
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7.205	Marking on motor vehicles.
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7.207	Loading and unloading.
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7.20702	Engine off and vehicle secure.

Rule

7.20706	No detonators with other explosives.
7.208	Driving.
7.2081	Caution passing fires.
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7.209	Handling and disposition of containers found leaking in transit.
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7.211	Design and construction.
7.2111	Lining of bodies.
7.2112	Pneumatic tires.
7.212	Inspection and maintenance.
7.213	Accidents.
7.2131	Disposition of spilled or leaking explosives.
7.2133	Warning of nearby persons.

7.200 *Definitions.* For the purpose of these regulations, *acceptable explosives* are divided into three classes, viz.:

Class A. Dangerous explosives; detonating or otherwise of maximum hazard.

Class B. Less dangerous explosives; inflammable hazard.

Class C. Relatively safe explosives; minimum hazard.

7.2001 *Dangerous explosives class A.*

7.20011 *High explosives.* High explosives are all explosives more powerful than low explosives or ordinary black powder, except smokeless powders and fulminates. Their distinguishing characteristic is their susceptibility to detonation by a blasting cap. Examples of high explosives are dynamite, picric acid, picrates, chlorate powders, nitrate of ammonia powders, trinitrotoluene, dry nitrocellulose (guncotton and negative cotton), dry nitrostarch, and fireworks that can be exploded en masse.

7.20012 *Black powder and low explosives.* Black powder and low explosives are general names used to describe all explosives similar in composition or characteristics to ordinary black powder, and which cannot be detonated by a commercial blasting cap. Examples are rifle, sporting, cannon, and blasting powders. *Flash powder* sheets in bulk, *flash powders* packed in inner units exceeding 2 ounces each, and flash powder or spreader cartridges exceeding 72 grains each are classed as low explosives.

7.20014 *Ammunition for cannon.* Ammunition for cannon includes all fixed or separate-loading ammunition to be fired from a cannon, gun, or mortar, as distinguished from ammunition fired from a device such as a pistol, revolver, rifle, shotgun, and similar firearms. It consists of a primer or igniter and propelling charge with or without projectile or shell. Ammunition for cannon with explosive projectiles includes fixed ammunition with explosive, gas, smoke, or incendiary projectile or shell containing a bursting charge. When the component parts are shipped separately, they must be shipped as prescribed herein.

7.20015 *Explosive projectiles, bombs, grenades, mines, torpedoes.*

⁴ Picric acid, dry, ammonium picrate, dry, trinitrotoluene, dry and trinitrobenzene, dry, in certain small quantities and under prescribed packing restrictions, are in some instances classed as drugs, medicines, or chemicals.

7.200151 *Explosive projectiles* are shells or projectiles loaded with explosives or bursting charges, with or without other materials, for use in cannon, guns, or mortars.

7.200152 *Grenades* are metal or other containers filled with explosives, toxic gases, tear gases, or incendiary or smoke-producing materials, and include *hand-grenades* and *rifle grenades*.

7.200153 *Explosive bombs* are containers filled with explosives and provided with a detonating or igniting device. They are used in warfare and include *aeroplane bombs* and *depth bombs*. The risks in transportation are similar to those in the transportation of explosive projectiles.

7.200154 *Explosive mines* are metal containers filled with a high explosive, and are provided with a detonating device. They are used in naval warfare. They contain larger amounts of explosives in each unit than the usual explosive projectiles or bombs.

7.200155 *Explosive torpedoes* are metal devices containing a means of propulsion and a quantity of high explosives.

7.20016 *Blasting caps* contain from 5 to 150 grains of dry fulminate of mercury or other similar substance either alone or in combination with fulminate of mercury, packed in a thin copper shell and fired by a slow-burning safety fuse. When a small "bridge" of fine wire is placed in a suitable priming material and arranged to fire the fulminate by means of an electric current, the cap is called an "electric blasting cap." Blasting caps cause explosions of a high order, or "detonations". This means the instantaneous conversion of the entire explosive into gas, instead of the less rapid conversion known as "combustion". Dynamite "detonates" and smokeless powder for cannon "burns".

7.20017 *Detonating fuzes and boosters*.

7.200171 *Detonating fuzes* are used in the military service to detonate the high explosive bursting charges of projectiles, mines, bombs, torpedoes, and grenades. In addition to a powerful detonator they may contain several ounces of a high explosive, such as tetryl or dry nitro-cellulose, all assembled in a heavy steel envelope.

7.200172 *Boosters* consist of a casing containing several ounces of a high explosive and are used to increase the intensity of explosion of the detonator of a detonating fuze.

7.2002 *Less dangerous explosives—Class B.*

7.20021 *Smokeless powders* (see note) are propellant explosives from which there is little or no smoke when fired. They include smokeless powder for cannon and smokeless powder for small arms. *Smokeless powder for cannon* used in the United States at the present time consists of a nitrocellulose colloid and is comparatively safe to handle and transport. *Smokeless powders for small arms* may consist of nitrocellulose or nitrocel-

lulose combined with nitroglycerin. So-called smokeless powders which are composed of *picrate* or *chlorate mixtures* are classed as high explosives.

NOTE: *Fire extinguisher charges* containing not to exceed 50 grains of smokeless powder per unit are exempt from these regulations.

7.20022 *Ammunition for cannon without explosive projectiles. Ammunition for cannon without explosive projectiles* includes all *fixed ammunition* for 37 millimeter (1½") caliber and larger without explosive projectile or shell.

7.20023 *Fireworks. Fireworks* include all manufactured articles designed primarily for the purpose of producing visible or audible pyrotechnic effects by combustion or explosion. Examples are *firecrackers, firecracker salutes, Roman candles, pin wheels, colored fires, rockets, serpents, railway fuses, railway torpedoes, aeroplane flares, sparklers, smoke pots, smoke candles, illuminating projectiles* not fused and without burster charges, *Very signal cartridges, fireworks bombs and salutes* (not high explosive), *toy torpedoes and caps, ammunition pellets* fired in a special holder, *flash powders* in inner units not exceeding 2 ounces each, *flash sheets* in interior packages, and *flash powder or spreader cartridges* containing not over 72 grains of flash powder each, and *flash cartridges*, consisting of a paper cartridge shell, small-arms primer, and flash composition, not exceeding 180 grains, all assembled in one piece.

7.2003 *Relatively safe explosives—Class C.*

7.20031 *Small-arms ammunition. Small-arms ammunition* includes all *fixed ammunition* such as is used in pistols, revolvers, rifles, shotguns, and similar firearms, or in machine guns with nonexplosive bullets, and consists usually of a paper or metallic cartridge case, the primer, and the propelling powder charge, with or without shot, bullet (except explosive bullets), tear-gas material, or pyrotechnics, the component parts necessary for one firing being all in one assembly.

7.20032 *Primers, percussion caps, fuzes, cordeau detonant, instantaneous fuze, squibs, igniters, and lighters.*

7.200321 *Primers, percussion fuzes, combination fuzes, and time fuzes* are devices used to ignite the powder charges of ammunition or the black-powder bursting charges of projectiles. For small-arms ammunition, the primers are usually called "small-arms primers" or "percussion caps".

7.200322 *Tracer fuzes* are devices which are attached to projectiles and contain a slow-burning composition to show the flight of projectiles at night.

7.200323 *Cordeau detonant* is a drawn lead tube fuze containing trinitrotoluene or a core of pentaerythrite tetranitrate overspun with yarns, tapes and waterproofing compounds.

7.200324 *Safety squibs* are small paper tubes containing a small quantity

of black powder. One end of each tube is usually twisted and tipped with sulphur.

7.200325 *Electric squibs* consist of small tubes or blocks containing a small quantity of ignition compound in contact with a wire bridge.

7.200326 *Delay electric igniters* consist of small metal tubes containing a wire bridge in contact with a small quantity of ignition compound. The ignition compound is in contact with or in close proximity to a short piece of safety fuse.

7.200327 *Instantaneous fuze* is cotton yarns impregnated with meal powder.

7.200328 *Fuze lighters and fuze igniters* are small cylindrical hollow pasteboard or metal tubes containing an igniting composition in one end, the other end being open to permit it to be placed on a safety fuze.

7.201 *Application of rules. See Rule 7.101.*

7.202 *Vehicular tunnels. See Rule 7.102.*

7.203 *Compliance required. See Rule 7.103.*

7.204 *Packages.*

7.2041 *Damp or stained packages of high explosives.* In the event any package of high explosives, when offered for shipment, shows excessive dampness, is or appears to be moldy, or shows outward signs of any oil stain, or shows any indication of any nature that the absorption of the liquid part of the explosive is imperfect, or that the amount of the liquid part is greater than the absorbent can carry, any such package shall not be accepted for transportation or be transported. Any claim that a stain is due to accidental contact with grease, oil, or other similar substance, must be affirmatively substantiated to or by the motor carrier. In the event of doubt concerning any such circumstances, no such package containing high explosives shall be accepted for transportation or be transported.

7.2043 *Acceptable packages.* Subject to the requirements of this Section and except as provided under Rule 7.104 and in Rule 7.10732 of these regulations, any motor carrier may accept for transportation or transport any acceptable explosive listed in Table 7.1-3 of Appendix 7.1 of these regulations: *Provided, however,* That no provision of this rule shall be so construed as to permit the acceptance or transportation of liquid nitroglycerin by any common carrier.

7.205 *Marking on motor vehicles. See Rule 7.105.*

7.206 *Shipping papers. See Rule 7.106.*

7.207 *Loading and unloading.*

7.20701 *Kinds of motor vehicles in which explosives may be transported.*

7.207011 *Explosives on trucks.*

² For provisions regarding the loading of explosives with other dangerous articles see Rule 7.17 of these regulations, and Table 7.1-1 in Appendix 7.1.

7.2070111 Liquid nitroglycerin. Liquid nitroglycerin may be transported by motor carriers other than common carriers only in a truck meeting the requirements set forth under Rule 7.2113, to which no form of trailer may be attached.

7.2070112 Explosives other than liquid nitroglycerin. Any explosive other than liquid nitroglycerin and forbidden explosives may be loaded into and transported on any truck, to which no form of trailer may be attached when so loaded.

7.207012 Explosives on semitrailers. Any explosive other than liquid nitroglycerin and forbidden explosives may be loaded into and transported on any semitrailer attached to a tractor, to which no form of trailer may be attached when so loaded.

7.207013 Explosives on full trailers. No explosives may be loaded into or transported on any full trailer.

7.207014 Explosives on buses. No explosives except small arms ammunition is authorized by these regulations to be transported on a motor vehicle transporting passengers except where no other practicable means of transportation of such explosives is available. No explosive listed in Table 7.1-3 as forbidden for transportation or acceptance by any motor carrier or for transportation on any bus may be loaded into or transported on any bus. No explosive except small arms ammunition may be carried in the passenger carrying space of any motor vehicle transporting passengers. Not to exceed one hundred pounds (100 lbs.) gross weight of any or all of the following kinds of explosives may be transported on a motor vehicle transporting passengers; primers; fuses, not including detonating fuses; fireworks, not including any kind of fireworks classed as a dangerous explosive, Class A. Samples of explosives for laboratory examination, not exceeding a net weight of one-half pound ($\frac{1}{2}$ lb.) each, and not exceeding twenty (20) samples at one time in a single motor vehicle, may be transported in a motor vehicle transporting passengers. Small arms ammunition may be transported without limitation as to quantity in a motor vehicle transporting passengers. No provision of this rule shall be so construed as to prohibit the transportation of military or naval forces with their accompanying munitions of war on passenger carrying or other motor vehicles.

7.20702 Engine off and vehicle secure. No explosive shall be loaded into or on or be unloaded from any motor vehicle with the engine running; and in every case, the hand brake on such motor vehicle shall be securely set and all reasonable precautions taken to prevent movement of the motor vehicle during loading or unloading.

7.20703 Care in loading explosives. No bale hooks or other metal tools shall be used for the loading, unloading, or other handling of explosives, nor shall any package or other container of explosives be rolled, thrown, or dropped dur-

ing such process. Special care shall be exercised to the end that packages or other containers containing explosives shall not catch fire from sparks or hot gases from the exhaust tail pipe.

7.20704 Lading within body or covered, tail gate closed. Except as provided in Rules 7.20706, 7.207091, and 7.207093, dealing with the transportation of liquid nitroglycerin, all of that portion of the lading of any motor vehicle which consists of explosives shall be contained entirely within the body of the motor vehicle, and if such motor vehicle has a tailboard or tailgate, it shall be closed and secured in place during such transportation. Every motor vehicle transporting explosives must either have a closed body or have the body thereof covered with a tarpaulin, and in either event care must be taken to protect the load from moisture and sparks.

7.20705 Explosives to be protected against damage by other lading. No motor vehicle transporting any explosive may transport as a part of its load any metal or other articles or materials likely to damage such explosive or any package in which it is contained, unless the different parts of such load be so segregated or secured in place in or on the motor vehicle and separated by bulkheads or other suitable means as to prevent such damage.

7.20706 No detonators in same motor vehicle with other explosives. Except as provided in Rules 7.20793 and 7.2113, no blasting caps or other materials designed and used for detonating charges of explosives may be transported in or on a motor vehicle with any high explosive, nor may any explosive projectile be transported with detonating fuze assembled in place, otherwise attached, or in the same motor vehicle, unless such fuze shall have been specifically authorized by the Bureau of Explosives for such transportation.

7.20707 Transfer of explosives en route. No dangerous or less dangerous explosive shall be transferred from one container to another, or from one motor vehicle to another vehicle, or from another vehicle to a motor vehicle, on any public highway, street, or road, except in case of emergency. In such cases flares (pot torches), fusees, red electric lanterns, or flags shall be set out in the manner prescribed for disabled or stopped motor vehicles in Rules 2.23 and 2.24. In any event, all practicable means, in addition to those hereinbefore prescribed, shall be taken to protect and warn other users of the highway against the hazard involved in any such transfer, or against the hazard occasioned by the emergency making such transfer necessary.

7.20708 Delivery to authorized person, or magazine. Every shipment of dangerous explosives by motor vehicle shall be delivered only to someone authorized to receive it, except such explosive shipments as are placed in magazines which are immediately thereafter locked.

7.20709 Liquid nitroglycerin.

7.207091 Special loading requirements. Liquid nitroglycerin may be accepted for transportation and transported by motor carriers other than common carriers only if it be loaded into or on a truck having the type of body specified in Rule 7.2113 hereof. No liquid nitroglycerin may be loaded directly above any other explosive, or in any quantity in excess of nine hundred quarts (900 qts.) on one motor vehicle or ten quarts (10 qts.) in any one individual container. Additional quantities of explosives, other than nitroglycerin, excepting any type of blasting or percussion cap or other detonating device, may be carried on such motor vehicle in a closed or covered bed or body which shall be firmly bolted or fastened above the lid of the compartment containing the nitroglycerin. In no case shall the net load be more than seven thousand five hundred pounds (7500 lbs.). (See Rules 7.207093 and 7.2113 for Blasting Caps, etc.)

7.207092 Separation of tools and supplies for preparing charges. Motor vehicles transporting liquid nitroglycerin may also transport the tools and supplies necessary for preparing and firing charges thereof, provided that such tools and supplies be properly secured in place so as to prevent their coming in contact with the body above specified.

7.207093 Caps or other explosives. Any explosive other than liquid nitroglycerin transported on any motor vehicle transporting liquid nitroglycerin shall be segregated, each kind from every other kind, and from tools or other supplies. Any percussion caps, blasting caps, or electric blasting caps, shall be carried either in a cloth container having individual pockets for each such cap, or in a container illustrated and described in Recommended Specification in Appendix 7.2 of these regulations, except that percussion caps need not be individually separated from each other. No greater number of any such caps shall be carried in the manner described than is necessary for use on any particular trip.

7.20710 No smoking while loading or unloading. Smoking on or about any motor vehicle during the loading or unloading of any explosive is forbidden.

7.20711 Forbidden explosives.

7.207111 Explosives forbidden to all motor carriers. No motor carrier may accept for transportation or transport any explosive listed in Table 7.1-3 as forbidden.

7.207112 Nitroglycerin forbidden to common carriers. Liquid nitroglycerin may not be accepted for transportation or be transported by any common carrier by motor vehicle.

7.208 Driving.

7.2081 Caution passing fires. Motor vehicles transporting explosives shall not be driven past fires of any kind burning on or near the highway or other thoroughfare until after due caution shall have been taken to ascertain that such passing can be made with safety.

7.2082 Avoidance of congested places. Drivers of motor vehicles transporting explosives shall avoid, so far as practicable, driving into or through congested thorough-fares, places where crowds are assembled, street car tracks, tunnels, viaducts, and dangerous crossings. So far as practicable, this shall be accomplished by prearrangement of routes.

7.2083 Reduce refuelings to minimum. Except for fuel containers for Diesel engine fuels, the fuel tank, tanks, or other containers on any motor vehicle in which is to be transported any explosive or which is to furnish the motive power for any such transportation, shall be suitably filled prior to the commencement of transportation of any explosives. Subsequent to the commencement of any such transportation fuel containers shall be suitably filled on each occasion at which it is necessary or expedient to refuel, unless a partial refilling would suffice to carry the motor vehicle or combination of motor vehicles to its final destination. Fuel containers shall not be refilled a greater number of times than is requisite for the transportation. If the engine is provided with an electrical ignition system, it shall be turned off and the engine stopped during the refueling process; and if with a magneto, it shall be grounded.

7.209 Handling and disposition of containers found leaking in transit. (See also Rule 7.109.)

7.2091 Cargo tanks. No rule.

7.2092 Containers other than cargo tanks.

7.20921 Packages capable of repair in transit. Any package of explosives found injured or broken in transit may be repaired or recoopered when this is evidently practicable and not dangerous. When a box that contains any explosive is so damaged that it cannot be repaired it should be reinforced by stout wrapping paper and twine, placed in another strong box, and surrounded by dry, fine sawdust, or dry and clean cotton waste, or elastic wads made from dry newspapers. The box cover should then be securely attached. A ruptured can or keg should be inclosed in a grain bag of good quality, and boxed. Injured packages thus protected, and properly marked with name of contents and consignee's name and address, may be carried to destination; provided, however, that the motor carrier, if himself the shipper, need not mark his own name and address on the package.

7.20922 Irreparably damaged packages. When any package of explosives in transit is found to be leaking or damaged and cannot be recoopered, it may not be transported beyond the minimum distance necessary to reach a place where the explosive may be disposed of with safety, except as provided in Rule 7.20921.

7.210 Parking in congested places. Except where the necessities of the operation make impracticable the application of this rule, no motor vehicle transporting any dangerous or less dangerous ex-

plosive shall be parked on any public street adjacent to or in proximity to any bridge, tunnel, dwelling, building or place where persons work, congregate or assemble; provided, however, that this rule shall not be so construed as to prohibit such motor vehicle being parked near persons loading or unloading any such motor vehicle.

7.211 Design and construction.

7.2111 Lining of body.

7.21111 No sharp projections inside body. No motor vehicle transporting any kind of explosive shall have on the interior of the body in which the explosives are contained, any inwardly projecting bolts, screws, nails, or other inwardly projecting parts likely to produce damage to any package or container of explosives during the loading or unloading process or in transit.

7.21112 Non-sparking lining—motor vehicles transporting explosives exclusively. In addition to the requirements of 7.21111, every motor vehicle used exclusively for the transportation of explosives shall be lined in such a manner that every portion of the lining with which a package may come in contact shall be of wood or other non-sparking material.

7.21113 Flooring, motor vehicles transporting explosives exclusively. All portions of the flooring of any motor vehicle used exclusively for the transportation of explosives shall be tight and shall, together with the bulkhead between the cab and engine, be protected with a covering of asbestos sheeting not less than $\frac{1}{8}$ inch thick, or by other non-inflammable insulating material affording equivalent protection which in turn shall be covered by non-rusting metallic sheet of sufficient thickness to afford mechanical protection to the insulating material.

7.2112 Pneumatic tires. Every motor vehicle used for the transportation of explosives shall be equipped on all wheels with pneumatic tires which shall fulfill the requirements set forth in Rule 3.347.

7.2113 Motor vehicles transporting liquid nitroglycerin.

7.21131 Construction of body. Every motor vehicle transporting liquid nitroglycerin shall be constructed in accordance with the requirements set forth in Specification 7.2-S-1 contained in Appendix 7.2 of these regulations, and no liquid nitroglycerin shall be transported elsewhere than in a motor vehicle fulfilling the requirements prescribed therein.

7.21132 Securing of auxiliary parts or machinery. All winches, other hoisting apparatus, or other auxiliary machinery or apparatus, if used, shall be securely attached to the motor vehicle, and no such part or apparatus shall extend sideways beyond the fender lines; and means shall be provided for the securing of chains, cables, or any other parts of any such auxiliary apparatus while in transit.

7.212 Inspection and maintenance.

7.2121 No hazardous repairs on loaded motor vehicles. None of the repairs re-

quired by Part 6 of these regulations to be made, nor shall any other repairs be performed on any motor vehicle containing explosives, except in such cases that such repair can be made without hazard; nor shall any such loaded motor vehicle be repaired in a closed garage.

7.2122 Floors clean of particles of explosive.

7.21221 Explosives other than liquid nitroglycerin. When particles of any explosive composition other than liquid nitroglycerin have escaped from a damaged container to the floor of the body of the carrier's motor vehicle, the floor shall be thoroughly swept and any absorbed portion removed.

7.21222 Liquid nitroglycerin. When any liquid nitroglycerin has been spilled on any portion of any motor vehicle it shall be washed with a suitable neutralizing agent until all of any such spillage shall have become completely neutralized.

7.2123 Rejection of leaking containers of liquid nitroglycerin. Any individual container used for the transportation of liquid nitroglycerin, or any boot used therewith, found in such a condition as to permit leakage, shall be discarded and shall not thereafter be repaired for further use.

7.213 Accidents.

7.2131 Disposition of spilled or leaking explosives. In the event of any accident involving any motor vehicle transporting any explosive in which packages are broken, all unbroken packages and as much of any broken packages as possible shall be carefully gathered and removed to a place of safety, in order to prevent fire or explosion. In clearing any wreck in which a motor vehicle containing any explosive is involved, care shall be exercised not to produce sparks with tools or by other means in moving of or working about the wreckage, so as to avoid as far as possible fires or explosions.

7.2132 Prevent explosion where possible. In addition to the requirements set forth in Rule 7.2131, all unbroken packages and as much as possible of any broken packages of explosive shall be immediately removed to a sufficient distance from the location of the accident to prevent the spread of fire thereto and sympathetic explosions or detonations thereof.

7.2133 Warning of nearby persons. In the event of an accident involving any motor vehicle transporting any explosive every available means shall be employed to prevent individuals other than those employed in the protection of persons or property or in the removal of hazards or wreckage, from congregating in the vicinity; such means shall also be employed to prevent smoking, to keep flame away, and to safeguard against the aggravation of the hazard present, and to warn other users of the highway. In the event that any motor vehicle laden with or carrying dangerous explosives is entangled with another or with any other object or structure,

following an accident, no attempt shall be made to disentangle either vehicle, or the laden vehicle from the object or structure, until the lading, together with any fragments thereof, be removed to a place at least two hundred feet (200') from the vehicle (and preferably two hundred feet (200') from any habitation). In the event of fire, involving a motor vehicle laden with any explosive, every practicable effort shall be made to give warning of danger of explosion to inhabitants in the vicinity and to other users of the highway.

SECTION 7.3—INFLAMMABLE LIQUIDS

ARRANGEMENT OF RULES

Rule	
7.300	Definitions.
7.3001	Inflammable liquid.
7.301	Application of rules.
7.302	Vehicular tunnels.
7.303	Compliance required.
7.304	Packages.
7.305	Marking on motor vehicles.
7.306	Shipping papers.
7.307	Loading and unloading.
7.3071	Engine stopped.
7.3073	Bonding or grounding.
7.308	Driving.
7.3081	Caution passing fires.
7.3084	No smoking while driving.
7.309	Handling and disposition of containers found leaking in transit.
7.3091	Leakage of cargo tanks en route.
7.3092	Leakage of containers other than cargo tanks.
7.310	Parking in congested places.
7.311	Design and construction.
7.3111	Existing tank motor vehicles continuing in service.
7.3112	New tank motor vehicles.
7.3113	Novel tank motor vehicles—special authorization.
7.312	Inspection and maintenance.
7.3123	Times of retesting Type A cargo tanks.
7.3124	Method of testing Type A cargo tanks.
7.3125	Testing of Type B cargo tanks.
7.313	Accidents.

7.300 *Definitions.* As used in these regulations—

7.3001 *Inflammable liquid.* An inflammable liquid is any liquid which gives off inflammable vapors (as determined by flash point from Tagliabue's open-cup tester, as used for test of burning oils) at or below a temperature of 80° F.

7.3004 *Cargo tank (inflammable liquids).* The term "cargo tank (inflammable liquids)" means:

7.30041 *Permanently attached tank.* Any tank designed to be permanently attached to any motor vehicle and in which is to be transported any inflammable liquid, hereby designated "Type A cargo tank (inflammable liquids)"; and

7.30042 *Aggregation of containers.* Any tank container, barrel, drum, cylinder, or other container not designed to be permanently affixed to the motor vehicle in which is to be transported any inflammable liquid, or any aggregation of any such containers, when and only when such container or containers are assembled as a unit with the structure of the motor vehicle, whether such containers are detachable or non-detachable therefrom, hereby designated "Type B cargo tank (inflammable liquids)".

7.30043 *Fuel tanks not a cargo tank.* Neither Rule 7.30041 nor Rule 7.30042 shall be so construed as to include a tank containing any inflammable liquid which is used solely for the purpose of supplying fuel for the propulsion of the vehicle.

7.3005 *Tank container.* The term "tank container" means any container having a water capacity of one thousand (1000) pounds (one hundred and twenty (120) gallons) or more in which is to be transported any inflammable liquid; the term includes any such container capable of being attached to and detached from a motor vehicle, and such a container capable of being attached to and detached from a motor vehicle or other vehicle, a railroad car, or a vessel, interchangeably; the term does not exclude any such container not provided with such interchangeable features.

7.301 *Application of rules.* See Rule 7.101.

7.302 *Vehicular tunnels.* See Rule 7.102.

7.303 *Compliance required.* See Rule 7.103.

7.304 *Packages.* No motor carrier may accept for transportation or transport any inflammable liquid in a cargo tank not complying with the requirements set forth under Rule 7.311 of these regulations. (See also Rule 7.104.)

7.305 *Marking on motor vehicles.* (See also Rule 7.105.)

7.3051 *Tank motor vehicles.* Every tank motor vehicle used for the transportation of any inflammable liquid, regardless of the quantity being transported, or whether loaded or empty, shall be conspicuously and legibly marked on each side and the rear thereof in letters at least three (3) inches high on a background of sharply contrasting color, optionally as follows:

(a) With a sign or lettering on the motor-vehicle with the word "Inflammable";

(b) With the common name of the inflammable liquid being transported; or

(c) With the name of the carrier or his trademark, when and only when such name or mark plainly indicates the inflammable nature of the cargo.

7.3052 *Motor vehicles other than tank motor vehicles.* See under Rule 7.1052.

7.306 *Shipping papers.* See Rule 7.106.

7.307 *Loading and unloading.**

7.3071 *Engine stopped.* Unless the engine of the motor vehicle is to be used for the operation of a pump, no inflammable liquid shall be loaded into or on or unloaded from any other motor vehicle than a tank motor vehicle with the engine running; and in any event

* For provisions regarding the loading of inflammable liquids with other dangerous articles see Rule 7.107 of Section 7.1 of these regulations and Table 7.1-3 in Appendix 7.1 hereof.

care shall be exercised to prevent ignition or inflammation of the vapors from any such liquid.

7.3072 *Tank motor vehicles attended.* Under no circumstances shall a tank motor vehicle be left unattended during the loading or unloading process. For the purpose of this rule, the delivery hose, when attached to the motor vehicle shall be deemed a part thereof.

7.3073 *Bonding or grounding.* For containers which are not in metallic contact with each other, either metallic bonds or ground conductors shall be provided for the neutralization of possible static charges prior to and during transfers of inflammable liquids between such containers. Such bonding shall be made by first connecting an electric conductor to the container to be filled and subsequently connecting the conductor to the container from which the liquid is to come, and not in any other order. To provide against ignition of vapors by discharge of static electricity, the latter connection shall be made at a point well removed from the opening from which the inflammable liquid is to be discharged.

7.3074 *Outage.* No Type A cargo tank or compartment thereof used for the transportation of any inflammable liquid shall be completely filled. The free space (outage) in a Type A cargo tank or compartment thereof used in the transportation of inflammable liquids for distances of one hundred miles (100 mi.) or more shall not be less than three percent (3%) of its volume, and in any case the free space shall not be less than one percent (1%); sufficient space shall be left vacant in every case to prevent leakage from or distortion of such tank or compartment by expansion of the contents due to rise in temperature in transit. Containers comprising Type B cargo tanks shall be filled in accordance with the Regulations for Shippers of this Commission.

7.3075 *Transfer of inflammable liquids en route.* No inflammable liquid shall be transferred from one container to another, or from one motor vehicle to another vehicle, or from another vehicle to a motor vehicle, on any public highway, street, or road, except in case of emergency. In such cases red electric lanterns or flags shall be set out in the manner prescribed for disabled or stopped motor vehicles in Rules 2.23 and 2.24 of these regulations. In any event, all practicable means, in addition to those hereinbefore prescribed, shall be taken to protect and warn other users of the highway against the hazard involved in any such transfer, or against the hazard occasioned by the emergency making such transfer necessary. Nothing contained in this Rule shall be so construed as to prohibit the fueling of machinery or vehicles used in road construction or maintenance.

7.3076 *No smoking while loading or unloading.* Smoking on or about any motor vehicle while loading or unloading any inflammable liquid, is forbidden.

7.308 *Driving.*

7.3081 *Caution passing fires.* Motor vehicles transporting inflammable liquids shall not be driven past fires of any kind burning on or near the highway or other thoroughfare until after due caution shall have been taken to ascertain that such passing can be made with safety.

7.3032 *Avoidance of congested places.* Drivers of motor vehicles transporting inflammable liquids shall avoid, so far as practicable, driving into or through congested thoroughfares, places where crowds are assembled, street car tracks, tunnels, viaducts and dangerous crossings. So far as practicable, this shall be accomplished by prearrangement of routes.

7.3083 *Reduce refuelings to minimum.* Except for fuel containers for Diesel engine fuels, the fuel tank, tanks, or other containers on any motor vehicle in which is to be transported any inflammable liquid, or which is to furnish the motive power for any such transportation, shall be suitably filled prior to the commencement of transportation of any such inflammable liquid. Subsequent to the commencement of any such transportation, fuel containers shall be suitably filled on each occasion at which it is necessary or expedient to refuel, unless a partial refilling would suffice to carry the motor vehicle or combination of motor vehicles to its final destination. Fuel containers shall not be refilled a greater number of times than is requisite for the transportation. If the engine is provided with an electrical ignition system, it shall be turned off and the engine stopped during the refueling process; and if with a magneto, it shall be grounded. So far as liquefied petroleum gases are concerned, the words "suitably filled" shall be construed to mean filling in accordance with Table 7.6-1 in Appendix 7.6 of these regulations.

7.3084 *No smoking while driving.* Smoking on or about any motor vehicle loaded with or transporting, or smoking on or about any tank motor vehicle used for the transportation of inflammable liquids, is forbidden.

7.3085 *Safety matches.* Matches may be carried by the driver of any motor vehicle transporting inflammable liquids, or by any one else upon such a vehicle, only if they are of the "strike-on box" or "book" varieties.

7.3086 *Stopping.* Whenever any motor vehicle transporting inflammable liquids is disabled upon the traveled portion of any highway or a shoulder next thereto, or where prudence indicates the wisdom of stopping for a period of time though not disabled, except within the corporate limits of municipalities, the following requirements shall

be complied with during the period of such stop:

(a) For motor vehicles transporting inflammable liquids otherwise than in cargo tanks, flares (pot torches), fuses, red electric lanterns, and flags shall be displayed as required under Rules 2.23 and 2.24 of Part 2 of these regulations.

(b) For motor vehicles used for the transportation of inflammable liquids in cargo tanks, whether loaded or empty, red electric lanterns and flags shall be displayed as required in Rules 2.232 and 2.234 and under Rule 2.24 of Part 2 of these regulations.

7.309 *Handling and disposition of containers found leaking in transit.* (See also Rule 7.109.)

7.3091 *Leakage of cargo tank en route.* In the event of leakage of liquid from any cargo tank or any compartment thereof used for the transportation of inflammable liquids, which develops or is discovered subsequent to the commencement of transportation, any one of the following means, or any means equally or more effective, shall be employed in order to minimize further hazard:

7.30911 *Further minimum transportation if safe.* Further to transport the cargo tank only the minimum distance to reach a place where the contents of the tank or compartment which is leaking may be disposed of with safety, meanwhile employing every available means to prevent the leakage or spillage of liquid upon the highway.

7.30912 *Disposition of contents when unsafe to continue.* In the event the leak is of such a character as to make further transportation of the cargo tank unsafe, to draw off the traveled portion of the highway, and to employ every available means for the safe disposal of the leaking liquid by preventing, so far as practicable, its spread over a wide area; by digging trenches to drain to a hole or depression in the ground; by diverting the liquid away from streams or sewers if possible; or by catching the liquid in containers if practicable. So far as practicable, every available means shall be employed to prevent the congregation of spectators, and to prevent smoking or the lighting of or carrying of lighted cigars, cigarettes or pipes in the vicinity, and fires or flames in the vicinity of the leaking cargo tank shall be extinguished.

7.3092 *Leakage of containers other than cargo tanks.* Insofar as any of the means set forth under Rule 7.3091 are applicable to leaking containers other than cargo tanks, precautions of a like nature for the disposition of any such leaking containers and/or the contents thereof, shall be taken.

7.3093 *Prevent leakage from spreading.* Whenever any inflammable liquid is escaping from a container, all practical means shall be taken to prevent

such liquid from spreading over a wide area, from flowing into sewers and streams, and from becoming ignited.

7.310 *Parking in congested places.* No rule.

7.311 *Design and construction.*

7.3111 *Existing tank motor vehicles continuing in service.*

7.31111 *Specification tank motor vehicles.* Tank motor vehicles used for the transportation of inflammable liquids which shall have been in service prior to June 15, 1940 may be continued in service provided that they have been designed and constructed in accordance with the requirements of Specification Number 1001, 1937 edition, of the American Petroleum Institute, or in accordance with the requirements of specifications of the National Fire Protection Association, 1929 or 1933 editions.

7.31112 *Non-specification tank motor vehicles.* Tank motor vehicles used for the transportation of inflammable liquids not meeting the requirements set forth in Rule 7.31111, which shall have been in service prior to June 15, 1940 may be continued in service provided that they fulfill the requirements set forth under Rule 7.312, and that they be provided with the accessories as specified in items 7.3-S-1.208, 7.3-S-1.2091, 7.3-S-1.210, 7.3-S-1.211, 7.3-S-1.212, 7.3-S-1.213, and 7.3-S-1.214 of Specification 7.3-S-1.2 of these regulations.

7.3112 *New tank motor vehicles.* Except as provided in Rule 7.3113 every new tank motor vehicle acquired by a motor carrier on or after June 15, 1940 for the transportation of any inflammable liquid shall comply with the requirements of Specification 7.3-S-1 of Appendix 7.3 of these regulations. A certificate from the manufacturer of the tank motor vehicle, from the manufacturer of the cargo tank, or from a competent testing agency, certifying that each such tank motor vehicle is designed and constructed in accordance with the requirements of Specification 7.3-S-1 shall be procured, and such certificate shall be retained in the files of the carrier during the time that such tank motor vehicle is employed in the transportation of inflammable liquids by him. In lieu of this certificate, if the motor carrier himself elects to ascertain if any such tank motor vehicle fulfills the requirements of Specification 7.3-S-1 by his own test, he shall similarly retain the test data.

7.3113 *Novel tank motor vehicles—special authorization.* The Commission may, upon written request for such authorization by a motor carrier, authorize the use of limited numbers, and for limited times, of new tank motor vehicles which fail to meet the requirements of Specification 7.3-S-1. In the event of such authorization, the carrier shall furnish those details concerning the design and construction of the tank motor vehicle as seem necessary for the determi-

nation of its ability safely to transport inflammable liquids.

7.3114 Marking of cargo tanks.

7.31141 *Metal identification plate.* On and after Jan. 1, 1941, there shall be on every cargo tank a metal plate located on the right side, near the front, in a place readily accessible for inspection. This plate shall be permanently affixed to the tank by means of soldering, brazing, welding, or other equally suitable means; and upon it shall be marked by stamping, embossing, or other means of forming letters into or on the metal of the plate itself, in the manner illustrated below, at least the information indicated below. The plate shall not be so painted as to obscure the markings thereon.

CARRIER'S SERIAL NUMBER¹

MANUFACTURER'S NAME²

DATE OF MANUFACTURE³

I C C 7.3-S-1⁴

NOMINAL TANK CAP'Y, U. S. GALLONS

7.31142 *Test date markings.* The date of the last test or retest required by these regulations and the due date of the next required routine test or retest shall be painted on the tank in letters not less than 1 1/4" high, in legible colors, immediately below the metal identification plate specified in Rule 7.31141.

7.31143 *Certification by markings.* The markings specified in Rules 7.31141 and 7.31142 shall serve to certify that the information thereby set forth is correct.

7.3115 *Type B cargo tanks.* Every type B cargo tank used for the transportation of any inflammable liquid shall comply with the provisions of Specification 7.3-S-1.6 of Appendix 7.3 of these regulations.

7.312 Inspection and maintenance.

7.3121 *No Hazardous repairs on loaded motor vehicles.* None of the repairs required by Part 6 of these regulations to be made, nor any other repairs, shall be performed on any motor vehicle containing any inflammable liquid, nor on a cargo tank, whether empty or loaded, except in such cases that such repair can be made without hazard; nor shall any such loaded motor vehicle be repaired in a closed garage.

7.3122 *No repair with flame unless gas-free.* No repair of a cargo tank used for the transportation of any inflammable liquid or any compartment thereof, nor of any container for fuel of whatever nature, may be repaired by any method employing a flame, arc, or other means of welding, unless the tank or

compartment shall first have been made gas-free.

7.3123 *Times of retesting of Type A cargo tanks.* Every cargo tank used for the transportation of any inflammable liquid shall be tested or retested as follows:

7.31231 *Tank out of service one year or more.* Every Type A cargo tank which has been out of transportation service for a period of one year or more shall not be returned again to or placed in such service until it shall successfully have fulfilled the requirements set forth under Rule 7.3124.

7.31232 *Non-specification tanks.* Every Type A cargo tank not complying with the requirements of Specification No. 1001, 1937 edition, of the American Petroleum Institute, Specification of the National Fire Protection Association 1929 or 1933, or Specification 7.3-S-1 shall be tested at least once in every calendar year and shall successfully fulfill the requirements set forth under Rule 7.3124. No two such required tests shall be closer together than six (6) months.

7.31233 *Specification tanks.* Every Type A cargo tank complying with the requirements of Specification No. 1001, 1937 edition, of the American Petroleum Institute, Specifications of the National Fire Protection Association, 1929 or 1933, or Specification 7.3-S-1 shall be tested at least once in every five-year period. If tested no oftener than once in every 5 years, at least one such test shall be made in the last year of any such five-year period. The time of reckoning for such testing of such cargo tanks shall be from the time of the last test made in accordance with the requirements set forth under Rule 7.3124; and if no such tests have ever been made, such tanks shall be tested within six (6) months after June 15, 1940.

7.31234 *Novel cargo tanks.* Every cargo tank which shall have been authorized by this Commission to transport inflammable liquids under the provisions of Rule 7.3113 shall be tested under requirements specifically set forth in the terms of such authorization.

7.31235 *Testing following accidents.* Every cargo tank capable of suitable repair following any accident in which a tank motor vehicle may have been involved shall be retested in accordance with the requirements set forth under Rule 7.3124 if the cargo tank has itself been damaged in a manner likely to affect the safety of operation of the tank motor vehicle, or if the damage to the tank motor vehicle is such as to make the safety of the cargo tank uncertain.

7.31236 *Special testing required by the Commission.* Upon the showing of probable cause of the necessity for retest, the Commission may, in its discretion, cause any cargo tank to be retested in accordance with the requirements of Rule 7.3124 at any time.

7.3124 *Method of testing Type A cargo tanks.*

7.31241 *Test for leaks.* Every Type A cargo tank shall be tested by a minimum air or hydrostatic pressure of three (3) pounds per square inch gage applied to each compartment, or to the whole tank if it be not divided into compartments. Such pressure shall be maintained for a period of at least five (5) minutes, during which, if the test is by air pressure, the entire exterior surface of all the joints shall be coated with a solution of soap and water, heavy oil, or other material suitable for the purpose, foaming or bubbling of which will indicate the presence of leaks. Hydrostatic pressure, if used, shall be gaged at the top of the tank; and the tank shall be inspected at the joints for the issuance of liquid to indicate leaks. Any leakage discovered by either of the methods above described, or by any other method, shall be suitably repaired, and the above described process shall be continued until no leaks are discovered, before any cargo tank is returned to service.

7.31242 *Test for distortion or failure.* Every Type A cargo tank shall be tested by the pressures prescribed in Rule 7.31241 and shall withstand such pressures without undue distortion or other indication of impending failure. If there is undue distortion, or if failure impends or occurs, the cargo tank shall not be returned to service unless a suitable repair is made. The suitability of the repair shall be determined by the same method of test.

7.3125 *Testing of Type B cargo tanks.* The testing of tank containers, cylinders or other containers comprising Type B cargo tanks shall be in accordance with the Regulations for Shippers of the Commission.

7.313 *Accidents.* In the event of an accident involving any motor vehicle transporting any inflammable liquid every available means shall be employed to prevent individuals other than those employed in the protection of persons or property or in the removal of hazards or wreckage, from congregating in the vicinity; such means shall also be employed to prevent smoking, to keep flame away, and to safeguard against the aggravation of the hazard present, and to warn other users of the highway.

SECTION 7.4—INFLAMMABLE SOLIDS AND OXIDIZING MATERIALS ARRANGEMENT OF RULES

Rule	Definitions:
7.400	Inflammable solid.
7.4001	Oxidizing material.
7.4002	Application of rules.
7.401	Vehicular tunnels.
7.402	Compliance required.
7.403	Packages.
7.404	Marking on motor vehicles.
7.405	Shipping papers.
7.406	Loading and unloading:
7.407	Inflammable solids and oxidizing materials in busses.
7.4071	Smoking.
7.4073	Mixed loadings.
7.4076	

¹ Carriers are not required to number their tanks serially; any designation regularly used by the carrier to identify the tank may be put in this space.

² In the event the identity of the tank manufacturer or the date of manufacture is not known and cannot be ascertained, the spaces indicated shall be marked "Make Unknown" and/or "Date of Manufacture Unknown."

³ Substitute "A P I Spec 1001, 1937", or "N F P A Spec 1929" (or 1933) or "No Specification", if appropriate.

Rule

- 7.408 Driving:
- 7.4081 Care passing fires.
- 7.4087 Care of lading while stopped.
- 7.409 Handling and disposition of containers found leaking in transit.
- 7.410 Parking in congested places.
- 7.411 Design and construction.
- 7.412 Inspection and maintenance.
- 7.413 Accidents:
- 7.4131 Disposition of spilled or leaking materials.
- 7.4132 Prevent spread of fire where possible.
- 7.4133 Warning of nearby persons.

7.400 *Definitions.* As used in these regulations.

7.4001 *Inflammable solid.* An inflammable solid is a solid substance other than one classified as an explosive, which is liable under conditions incident to transportation, to cause fires through friction, through absorption of moisture or through spontaneous chemical changes.

7.4002 *Oxidizing materials.* An oxidizing material is a substance such as a chlorate, permanganate, peroxide, or nitrate, that yields oxygen readily to stimulate the combustion of organic matter.

7.4003 *Matches.* For the purpose of these regulations, matches are divided into three classes, viz, "strike-anywhere matches," "strike-on-box matches," and "book matches." Strike-anywhere matches are those for the ignition of which a prepared surface is not required. Strike-on-box matches are those matches intended to be ignited on a prepared surface. Book matches are those intended to be ignited on a prepared surface only and which are stitched in or fastened to a cover or folder.

7.401 *Application of rules.* (See Rule 7.101.)

7.402 *Vehicular tunnels.* (See Rule 7.102.)

7.403 *Compliance required.* (See Rule 7.103.)

7.404 *Packages.* (See Rule 7.104.)

7.405 *Marking on motor vehicles.* No rule.

7.406 *Shipping papers.* (See Rule 7.106.)

7.407 *Loading and unloading.*¹⁰

7.4071 *Inflammable solids or oxidizing materials in buses.* No motor carrier may transport inflammable solids or oxidizing materials in an amount exceeding an aggregate of 100 lbs. gross weight in a motor vehicle transporting passengers. (See Rule 7.10733.)

7.4072 *Lading within body or covered, tailgate closed.* All of that portion of the lading of any motor vehicle transporting inflammable solids or oxidizing materials shall be contained entirely within the body of the motor vehicle and shall be covered by such body, by tarpaulins, or other suitable means, and if such motor vehicle has a tailboard or tailgate, it shall be closed and secured

in place during such transportation: provided, however, that the provisions of this paragraph need not apply to "pick-up and delivery" motor vehicles when such motor vehicles are used in no other transportation than in and about cities, towns, or villages.

7.4073 *No smoking while loading or unloading.* Smoking on or about any motor vehicle while loading or unloading any inflammable solid or oxidizing material is forbidden.

7.4074 *Lading ventilation, precautions against spontaneous combustion.* Whenever a motor carrier has knowledge concerning the hazards of spontaneous combustion or heating of any article to be loaded on a motor vehicle, such article shall be so loaded as to afford sufficient ventilation of the load to provide reasonable assurance against fire from this cause; and in such a case the motor vehicle shall be unloaded as soon as practicable after reaching its destination. Charcoal screenings or ground, crushed, granulated, or pulverized charcoal, in bags, shall be so loaded that the bags are laid horizontally in the motor vehicle, and so piled that there will be spaces for effective air circulation, which spaces shall not be less than 4 inches wide; and air spaces shall be maintained between rows of bags. Bags shall not be piled closer than 6 inches from the top of any motor vehicle with a closed body.

7.4075 *Certain loadings to be kept dry.* Especial care shall be taken in the loading of any motor vehicle with inflammable solids or oxidizing materials which are likely to become hazardous to transport when wet, to keep them from being wetted during the loading process and to keep them dry during transit. Examples of such materials are calcium carbide and unslaked lime. Especial care shall also be taken in the loading of any motor vehicle with inflammable solids or oxidizing materials, which are likely to become more hazardous to transport by wetting, to keep them from being wetted during the loading process and to keep them dry during transit. Examples of such materials are charcoal screenings, ground, crushed or pulverized charcoal, lump charcoal, hair felt, jute, or other fibrous materials.

7.4076 *Mixed loadings.* Inflammable solids and/or oxidizing materials, when transported on a motor vehicle as a part of mixed lading not otherwise forbidden, shall, so far as practicable, be so loaded as to provide ready access thereto for shifting or removal of the dangerous articles without the necessity for the shifting or removal of the remainder of the lading.

7.4077 *Matches.*

7.40771 *Proximity to other inflammable articles.* Matches of whatever character shall not be loaded in proximity to any other inflammable articles.

7.40772 *Smooth vehicle interior.* Unless "strike-anywhere matches" are contained in wooden outside boxes, special

care shall be taken to provide that the inside surfaces of any motor vehicle into which such matches are to be loaded and with which surfaces the containers might come in contact, shall be smooth, without protrusions of any sort, such as bolts, nuts, sharp edges or corners, etc., and there shall be provided for this purpose smooth wooden inner linings, if the interior of the motor vehicle is not otherwise smooth in accordance with this requirement.

7.40773 *Staying or blocking.* Special care shall be exercised in the loading of packages containing "strike-anywhere matches" to prevent the shifting or jamming of any such package during transit. To this end, the packages shall be compactly loaded with the strongest dimensions of each box or other container loaded lengthwise of the motor vehicle.

7.40774 *Reloading of damaged packages.* In the event of damage to matches or packages of matches by fire or by water in extinguishing a fire in transit, they shall be reloaded in accordance with all of the foregoing requirements for the packing and loading of matches. Great care shall be taken, however, first to examine and repair any damage to outside containers before reloading, and all loose matches shall be destroyed. Smoking boxes of matches shall not be opened in the vicinity of the remainder of the lading. Such boxes shall be destroyed at a safe distance from the motor vehicle, preferably by burning, and shall not be left, either smoking or burning.

7.4078 *Nitrate of soda bags.* Unwashed, empty bags having contained nitrate of soda may be transported in truckload lots only, in motor vehicles having closed or covered bodies lined with paper, when loaded by the shipper and to be unloaded by the consignee.

7.408 *Driving.*

7.4081 *Care passing fires.* Motor vehicles transporting inflammable solids or oxidizing materials shall not be driven past fires of any kind burning on or near the highway or other thoroughfare until after due caution shall have been taken to ascertain that such passing can be made with safety.

7.4084 *Smoking forbidden unless lading in closed body.* Unless the lading is entirely contained within a closed body, smoking is forbidden on any motor vehicle loaded with or transporting any inflammable solids or oxidizing material.

7.4085 *No undue delay.* All shipments of these inflammable solids in which the hazards of spontaneous heating is an element shall be transported without undue or unnecessary delay, from and including the time of commencement of the loading of the cargo until its final discharge at destination.

7.4086 *Stopping.* Whenever any motor vehicle transporting inflammable solids or oxidizing materials is disabled upon the traveled portion of any highway or a shoulder next thereto, or where prudence indicates the wisdom of stopping for a period of time though not dis-

¹⁰ For provisions regarding the loading of inflammable solids and oxidizing materials with other dangerous articles, see Rule 7.107 of Section 7.1 of these regulations, and Table 7.1-1 in Appendix 7.1 hereof.

abled, except within the corporate limits of municipalities, flares (pot torches), fuses, red electric lanterns, and flags shall be displayed in the manner prescribed in Rule 2.23 of Part 2 of these regulations (See also Rules 2.22 and 2.24.)

7.4087 *Care of lading while stopped.* In the event of disablement of a motor vehicle transporting any inflammable solid or oxidizing material in which the hazard of spontaneous heating is an element, special care shall be taken to guard the vehicle and its load in the event spontaneous heating or combustion takes place, or to take such steps as may be necessary to provide against this hazard; similarly, steps should be taken to provide against the wetting of any inflammable solid or oxidizing material. In any case, especial effort shall be taken to remove the motor vehicle to a place where the natural hazards of the materials being transported may be provided against.

7.409 *Handling and disposition of containers found leaking in transit.* (See Rule 7.109.)

7.410 *Parking in congested places.* No rule.

7.411 *Design and construction.* No rule.

7.412 *Inspection and maintenance.* See Part 6 of these regulations.

7.413 *Accidents.*

7.4131 *Disposition of spilled or leaking materials.* In the event of any accident involving any motor vehicle transporting any inflammable solid or oxidizing material in which packages are broken, as much as possible of any broken packages shall be carefully gathered and removed to a place of safety, and if the removal of unbroken packages from the motor vehicle would decrease the hazard of fire or other hazard, they shall be removed. The handling of any such materials not contained in packages shall be such as to promote the greatest safety to other users of the highway.

7.4132 *Prevent spread of fire, where possible.* Care shall be exercised in the event of damage to inflammable solids or oxidizing materials which either have been, or may be about to be on fire, to confine the likelihood of spread of the fire to the smallest possible volume.

7.4133 *Warning of nearby persons.* In the event of any accident involving any motor vehicle, in which any inflammable solid or oxidizing material may have become spilled, every practicable and available means shall be taken to warn all approaching persons of the hazard of fire or other hazard peculiar to the properties of the inflammable solid or oxidizing material being transported.

SECTION 7.5—CORROSIVE LIQUIDS

ARRANGEMENT OF RULES

Rule	
7.500	Definitions.
7.5001	Corrosive liquid.
7.5006	Passification or neutralization process.
7.501	Application of rules.
7.502	Vehicular tunnels.

Rule	
7.503	Compliance required.
7.504	Packages.
7.505	Marking on motor vehicles.
7.506	Shipping papers.
7.507	Loading and unloading.
7.5071	Corrosive liquids on busses.
7.5072	Frangible containers.
7.5074	Outage.
7.508	Driving.
7.509	Handling and disposition of containers found leaking in transit.
7.510	Parking in congested places.
7.511	Design and construction.
7.5111	Existing tank motor vehicles continuing in service.
7.5112	New tank motor vehicles.
7.5113	Novel tank motor vehicles—special authorization.
7.512	Inspection and maintenance.
7.5123	Times of retesting Type A cargo tanks.
7.5124	Method of testing Type A cargo tanks.
7.5125	Testing of Type B cargo tanks.
7.513	Accidents.

7.500 Definitions.

7.5001 *Acids or other corrosive liquids.* A corrosive liquid is a strong mineral acid or other corrosive fluid which is liable to cause fire when mixed with chemicals or with organic matter, or is liable, in case of leakage, to damage other freight materially.

7.5004 *Cargo tank (corrosive liquids).* The term "cargo tank (corrosive liquids)" means:

7.50041 *Permanently attached tank.* Any tank designed to be permanently attached to any motor vehicle and in which is to be transported any corrosive liquid, hereby designated "Type A cargo tank (corrosive liquids);" or

7.50042 *Aggregation of containers.* Any tank container, barrel drum, cylinder, or other container not designed to be permanently affixed to the motor vehicle in which is to be transported any corrosive liquid, or any aggregation of any such containers, when and only when such container or containers are assembled as a unit with the structure of the motor vehicle, whether such containers are detachable or non-detachable therefrom, hereby designated "Type B cargo tank (corrosive liquids)."

7.5005 *Tank container.* The term "tank container" means any container having a water capacity of one thousand (1000) pounds (one hundred and twenty (120) gallons) or more in which is to be transported any corrosive liquid; the term includes any such container capable of being attached to and detached from a motor vehicle, and such a container capable of being attached to and detached from a motor vehicle or other vehicle, a railroad car, or a vessel, interchangeably; the term does not exclude any such container not provided with such interchangeable features.

7.5006 *Passification (or neutralization) process.* The term "passification process" and "neutralization process" as used herein are synonymous and mean that chemical process which renders the inside of a metal container passive or neutral to hydrofluoric acid.

7.501 *Application of rules.* See Rule 7.101.

7.502 *Vehicular tunnels.* See Rule 7.102.

7.503 *Compliance required.* See Rule 7.103.

7.504 *Packages.* No motor carrier may accept for transportation or transport any corrosive liquid in a cargo tank not complying with the requirements set forth under Rule 7.511 of these regulations. (See also Rule 7.104)

7.505 *Marking on motor vehicles.* (See also Rule 7.105)

7.5051 *Tank motor vehicles.* Every tank motor vehicle used for the transportation of any corrosive liquid, regardless of the quantity being transported, or whether loaded or empty, shall be conspicuously and legibly marked on each side and the rear thereof in letters at least three (3) inches high on a background of sharply contrasting color, optionally as follows:

(a) The common name of the corrosive liquid being transported, or

(b) A sign or lettering on the motor vehicle, with the words "Acid", or, when transporting corrosive liquids other than acids, the words "Corrosive Liquid".

7.5052 *Motor vehicles other than tank motor vehicles.* See Rule 7.1052.

7.506 *Shipping papers.* See Rule 7.106.

7.507 *Loading and unloading.*¹¹

7.5071 *Corrosive liquids in buses.* No motor carrier may transport corrosive liquids in an amount exceeding an aggregate of one hundred (100) pounds gross weight in a motor vehicle transporting passengers. (See Rule 7.10733)

7.5072 *Frangible containers.* In general, individual carboys and other frangible containers of acids or other corrosive liquids, including charged electric storage batteries, shall, when loaded by hand, be individually loaded into and unloaded from any motor vehicle in which they are to be, or have been, transported. All reasonable precautions shall be taken to prevent, by all practicable means, the dropping of any such containers or batteries containing corrosive liquids. No such container or battery shall be loaded into a motor vehicle having an uneven floor surface, nor shall any carboy or other container or corrosive liquid be loaded elsewhere than on the floor within the body of the motor vehicle. Means shall be provided to prevent by all practicable means, in all cases, the shifting of containers or batteries during transit. Nothing contained in this rule shall be so construed as to prevent the use of cleats or other retaining means for the purpose of preventing shifting of containers or batteries.

¹¹ For provisions regarding the loading of corrosive liquids with other dangerous articles see Rule 7.107 of Section 7.1 of these regulations, and Table 7.1-3 in Appendix 7.1 hereof.

7.5073 Access in mixed loadings. When practicable, corrosive liquids loaded with other lading of such character as to constitute a permissible mixed lading, shall be so loaded as to provide ready access thereto for the shifting or removal of such liquids or of other parts of the lading.

7.5074 Outage. No Type A cargo tank or compartment thereof used for the transportation of any corrosive liquid shall be completely filled; sufficient space shall be left vacant in every case to prevent leakage from or distortion of any such cargo tank by expansion of the contents due to rise in temperature in transit. Containers comprising Type B cargo tanks shall be filled in accordance with the Regulations for Shippers of this Commission.

7.5075 Nitric acid. In addition to the requirements set forth in Rule 7.5072 of this Section and those in Table 7.1-3 of Appendix 7.1 of these regulations, no carboy or other container of nitric acid shall be loaded above any container containing any other kind of material. The loading of carboys or other containers of nitric acid shall be limited to two tiers.

7.5076 Storage batteries. In addition to the requirements set forth in Rule 7.5072 of this Section and those in Table 7.1-3 of Appendix 7.1 of these regulations, all storage batteries containing any electrolyte, shall be so loaded, if loaded with other lading, that all such batteries will be protected against other lading falling onto or against them; and adequate means shall be provided in all cases for the protection and insulation of electrodes against short circuits. When any such electric storage batteries are loaded more than one tier high, adequate provision shall be made for the support of each tier of such batteries. No such support for any tier of electric storage batteries will be deemed to be adequate when any part of the weight of the batteries in such tier is transmitted to any other batteries.

7.508 Driving.

7.5081 Jars, jolts, etc. Especial care shall be exercised in the driving of any motor vehicle containing any corrosive liquid to avoid violent jars, jolts, bumps, or accelerations in any direction, likely to produce shifting or breaking of the contents of the motor vehicle.

7.5082 Stopping. Whenever any motor vehicle transporting any corrosive liquid is disabled upon the traveled portion of any highway or a shoulder next thereto or when prudence indicates the wisdom of stopping for a period of time though not disabled, except within the corporate limits of municipalities, flares (pot torches), fuses, red electric lanterns and flags shall be displayed in the manner prescribed in Rule 2.23 of Part 2 of these regulations. (See also Rules 2.22 and 2.24)

7.509 Handling and disposition of containers found leaking in transit.

7.5091 Cargo tanks. In the event of leakage of liquid from any cargo tank or any compartment thereof used for the transportation of corrosive liquids, which develops or is discovered subsequent to the commencement of transportation, any one of the following means, or any means in addition to those herein prescribed, equally or more effective, shall be employed to minimize further hazard:

(a) Further to transport the cargo tank only the minimum distance to reach a place where the contents of the tank or compartment which is leaking may be disposed of with safety, meanwhile employing every available means to prevent the spillage or leakage of any liquid on the highway.

(b) In the event the leak is of such a character as to make further transportation of the cargo tank unsafe, to draw off the traveled portion of the highway, and to employ every available means for the safe disposal of the leaking liquid by preventing, so far as practicable, its spread over a wide area, as by absorbing by means of the use of non-combustible absorbent material, such as fine ashes, sand, earth, etc., or by any other practicable means; by digging trenches to drain to a hole or depression in the ground; by diverting the liquid away from streams or sewers if possible; or by catching the liquid in containers if practicable. So far as practicable, every available means shall be employed to prevent the congregation of spectators and to prevent them from coming in contact with the liquid or its fumes. All available means shall be taken to prevent injury or damage to other users of the highway, or to livestock or farm animals, which might be occasioned by the unloading of the corrosive liquid.

7.5092 Containers other than cargo tanks. Insofar as any of the means set forth in Rule 7.5091 are applicable to leaking containers other than cargo tanks, precautions of a like nature for the disposition of any such leaking containers and/or the contents thereof shall be taken.

7.510 Parking in congested places. No rule.

7.511 Design and construction.

7.5111 Existing tank motor vehicles continuing in service.

7.51111 Specification tank motor vehicles. Tank motor vehicles used for the transportation of corrosive liquids which shall have been in service prior to June 15, 1940, may be continued in service provided they have been designed and constructed in accordance with the requirements set forth in Paragraph T-117 (a), T-118 (a) and (b), T-120, T-121, T-122, T-123 and T-124 of Regulations for the Transportation of Explosives and Other Dangerous Articles on Public Highways by

Motor Truck or Other Vehicle, approved, adopted, and prescribed by order of this Commission dated November 6, 1934 and vacated on June 15, 1940.

7.51112 Non-specification tank motor vehicles. Tank motor vehicles used for the transportation of corrosive liquids not meeting the requirements set forth in Rule 7.51111 which shall have been in service prior to June 15, 1940, may be continued in service provided they fulfill the requirements set forth under Rule 7.512 and are and can be maintained in safe operating condition, but in any event they shall be equipped with at least the accessories as specified in items 7.5-S-1.210, 7.5-S-1.213, 7.5-S-1.214, 7.5-S-1.2161, and 7.5-S-1.217 of Specification 7.5-S-1 of Appendix 7.5 of these regulations.

7.5112 New tank motor vehicles. Except as provided in Rule 7.5113 every new tank motor vehicle acquired by a motor carrier on or after June 15, 1940, for the transportation of any corrosive liquid shall comply with the requirements of Specification 7.5-1 of Appendix 7.5 of these regulations. A certificate from the manufacturer of the tank motor vehicle, from the manufacturer of the cargo tank, or from a competent testing agency, certifying that each such tank motor vehicle is designed and constructed in accordance with the requirements of Specification 7.5-1 shall be procured, and such certificate shall be retained in the files of the carrier during the time that such tank motor vehicle is employed in the transportation of corrosive liquids by him. In lieu of this certificate, if the motor carrier himself elects to ascertain if any such tank motor vehicle fulfills the requirements of Specification 7.5-S-1 by his own test, he shall similarly retain the test data.

7.5113 Novel tank motor vehicles—special authorization. The Commission may, upon written request for such authorization by a motor carrier, authorize the use of limited numbers, and for limited times, of new tank motor vehicles which fail to meet the requirements of specification 7.5-S-1. In the event of such request for authorization, the carrier shall furnish those details concerning the design and construction of the tank motor vehicle as seem necessary for the determination of its ability safely to transport corrosive liquids.

7.5114 Marking of cargo tanks.

7.51141 Metal identification plate. On the right side, near the front, and in a place readily accessible for inspection, there shall be on every cargo tank a metal plate. This plate shall be permanently affixed by means of soldering, brazing, welding, or other suitable means; and upon it shall be marked by stamping, embossing, or other means of forming letters into or on the metal of the plate itself, in the manner illustrated below, at least the information

indicated below. The plate shall not be so painted as to obscure the markings thereon.

CARRIER'S SERIAL NUMBER¹²

MANUFACTURER'S NAME¹³

DATE OF MANUFACTURE¹³

I C C 7.5-S-1¹⁴

NOMINAL CAP'Y ----- U S GALLONS

7.51142 *Test date markings.* The date of the last test or retest required by these regulations and the due date of the next required routine test or retest shall be painted on the tank in letters not less than one and one-quarter inches (1 1/4") high, in legible colors, immediately below the metal identification plates specified in Rule 7.51141.

7.51143 *Certification by markings.* The markings specified in Rules 7.51141 and 7.51142 shall serve to certify that the information thereby set forth is correct.

7.5115 *Type B cargo tanks.* Every Type B cargo tank used for the transportation of any corrosive liquid shall comply with the provisions of Specification 7.5-S-1.3 of Appendix 7.5 of these regulations.

7.512 *Inspection and maintenance.*

7.5123 *Times of retesting of cargo tanks.* Every cargo tank used for the transportation of any corrosive liquid shall be tested or retested as follows:

7.51231 *Tanks out of service one year or more.* Every cargo tank which has been out of transportation service for a period of one year or more shall not be returned again to or placed in such service until it shall have successfully fulfilled the requirements set forth under Rule 7.5124.

7.51232 *Non-specification tanks.* Every cargo tank not complying with the requirements set forth in Rule 7.51111 or with the requirements of Specification 7.5-S-1 of Appendix 7.5 shall be tested at least once in every calendar year, and shall successfully fulfill the requirements set forth under Rule 7.5124. No two such required tests shall be closer together than six (6) months.

7.51233 *Specification tanks.* Every cargo tank complying with the requirements set forth in Rule 7.51111 or Specification 7.5-S-1 of Appendix 7.5 shall be tested at least once in every five year period. If tested no oftener than once every five years, at least one such test shall be made in the last year of any such five year period. The time of reckoning of such testing of such cargo tanks shall be from the time of the last test made in accordance with the requirements set

forth under Rule 7.5124; and if no such tests have ever been made, such tanks shall be tested within six (6) months after June 15, 1940.

7.51234 *Novel cargo tanks.* Every cargo tank which shall have been authorized by this Commission to transport corrosive liquids under the provisions of Rule 7.5113 shall be tested under requirements specifically set forth in the terms of such authorization.

7.51235 *Testing following accidents.* Every cargo tank capable of suitable repair following any accident in which a tank motor vehicle may have been involved shall be retested in accordance with the requirements set forth under Rule 7.5124 if the cargo tank has itself been damaged in a manner likely to affect the safety of operation of the motor vehicle, or if the damage to the tank motor vehicle is such as to make the safety of the cargo tank uncertain.

7.51236 *Special testing required by the Commission.* Upon the showing of probable cause of the necessity for retest, the Commission may, in its discretion, cause any cargo tank to be retested in accordance with the requirements of Rule 7.5124 at any time.

7.5124 *Method of testing.*

7.51241 *Test for leaks.*

7.512411 *Cargo tanks.* Every cargo tank shall be tested by completely filling the tank and dome with water or other liquid having a similar viscosity, the temperature of which shall not exceed 100° F. during the test, and applying a pressure of sixty (60) pounds per square inch gage. The tank must hold the prescribed pressure for at least ten (10) minutes without leakage or evidence of distress. All closures shall be in place while test is made, and the pressure shall be gaged at the top of the tank.

7.512412 *Heating systems.* Systems for the heating of the contents of cargo tanks employing such a medium as steam or hot water under pressure shall be tested with hydrostatic pressure and proved to be tight at two hundred (200) pounds per square inch gage. Heating systems employing flues for the heating of the contents of the cargo tanks shall be tested by such means as to insure against the leakage of the contents of the tanks either into the flues or into the atmosphere.

7.51242 *Test for distortion or failure.* Every cargo tank shall be tested by the pressures prescribed in Rule 7.512411 and shall withstand such pressures without undue distortion or other indication of impending failure. If there is undue distortion, or if failure impends or occurs, the cargo tank shall not be returned to service unless a suitable repair is made. The suitability of the repair shall be determined by the same method of test.

7.5125 *Testing of Type B cargo tanks.* The testing of tank containers, cylinders or other containers comprising Type B cargo tanks shall be in accordance

with the requirements contained in the Regulations for Shippers of the Commission.

7.513 *Accidents.* In the event of any accident involving any motor vehicle transporting corrosive liquids in which has been involved the breakage, spillage, or leakage of containers of such liquids, care shall be exercised in the handling of any other lading which may have become damaged thereby so as to minimize the hazard in handling such damaged lading during the unloading process; and the interior or any other parts of the motor vehicle upon which the corrosive liquid may have become spilled shall be thoroughly washed with water as soon after the unloading process as feasible and prior, in any event, to the subsequent reloading of the motor vehicle.

SECTION 7.6—COMPRESSED GASES

ARRANGEMENT OF RULES

Rule	Definitions:
7.600	Compressed gas.
7.6001	Filling density.
7.6006	Application of rules.
7.601	Vehicular tunnels.
7.602	Compliance required.
7.603	Packages.
7.604	Marking on motor vehicles.
7.605	Shipping papers.
7.606	Loading and unloading:
7.607	Busses.
7.60701	Floors or platforms essentially flat.
7.60702	Use of engines in tank motor vehicles.
7.60707	Keep fire away.
7.60708	Driving:
7.608	Care in passing fires.
7.6081	Reduce refuelings to minimum.
7.6083	Handling and disposition of containers found leaking in transit.
7.609	Parking in congested places.
7.610	Design and construction:
7.611	Existing tank motor vehicles continuing in service.
7.6111	New tank motor vehicles.
7.6112	Painting of cargo tanks.
7.6115	Inspection and maintenance:
7.612	Times of retesting of Type A cargo tanks.
7.6123	Method of testing.
7.6124	Testing of Type B cargo tanks.
7.613	Accidents:
7.6131	Disposal of leaking inflammable gases.
7.6132	Warning.

7.600 Definitions.

7.6001 *Compressed gas.* A compressed gas is defined as any material with a gauge pressure exceeding 25 pounds per square inch at 70° F.; or any liquid inflammable material having a vapor pressure exceeding 40 pounds per square inch, absolute, at 100° F. March to October, inclusive, or exceeding 45 pounds per square inch, absolute, at 100° F. November to February, inclusive, as determined by the method for determining the vapor pressure of liquids set forth in the Regulations for Shippers of this Commission, as amended. (See Rule 7.70011 for gases defined and classified as poisonous.)

7.6004 *Cargo tank (compressed gases).* The term "cargo tank (compressed gases)" means:

7.60041 *Permanently attached tank.* Any tank designed to be permanently attached to any motor vehicle and in which

¹² Carriers are not required to number their tanks serially; any designation regularly used by the carrier to identify the tank may be put in this space.

¹³ In the event the identity of the tank manufacturer or the date of manufacture is not known and cannot be ascertained, the spaces indicated shall be marked "Make Unknown" and/or "Date of Manufacture Unknown".

¹⁴ Substitute "I C C Spec—T-118", "I C C Spec—7.5-S-1.2", or "No Specification", as appropriate.

is to be transported any compressed gas, hereby designated "Type A cargo tank (compressed gases)"; or

7.60042 Aggregation of containers. Any tank container, cylinder, or other container not designed to be permanently affixed to the motor vehicle in which is to be transported any compressed gas, or any aggregation of such containers, when and only when such container or containers are assembled as a unit with the structure of the motor vehicle, whether such containers are detachable or non-detachable therefrom, hereby designated "Type B cargo tank (compressed gases)."

7.60043 Fuel tank not a cargo tank. Neither Rule 7.60031 nor 7.60032 shall be so construed as to include a tank containing any compressed gas which is used solely for the purpose of supplying fuel for the propulsion of the vehicle.

7.6005 Tank container. The term "tank container" means any container having a water capacity of one thousand (1,000) pounds (one hundred and twenty (120) gallons) or more in which is to be transported any compressed gas; the term includes any such container capable of being attached to and detached from a motor vehicle, and such a container capable of being attached to and detached from a motor vehicle or other vehicle, a railroad car, or a vessel, interchangeably; the term does not exclude any such container not provided with such interchangeable features.

7.6006 Filling density. The "filling density" is hereby defined as the percent ratio of the weight of gas in a container to the weight of water that the container will hold.

7.601 Application of rules. (See Rule 7.101.)

7.602 Vehicular tunnels. (See Rule 7.102.)

7.603 Compliance required. (See Rule 7.103.)

7.604 Packages. No motor carrier may accept for transportation or transport any compressed gas in a cargo tank not complying with the requirements set forth under Rule 7.611 of these regulations. (See also Rule 7.104)

7.605 Marking on motor vehicles. (See also Rule 7.105)

7.6051 Tank motor vehicles. Every tank motor vehicle used for the transportation of any compressed gas, regardless of the quantity being transported, or whether loaded or empty, shall be conspicuously and legibly marked on each side and the rear thereof in letters at least three (3) inches high on a background of sharply contrasting color optionally as follows:

(a) With a sign or lettering on the motor vehicle with the words "Compressed Gas", "Inflammable Compressed Gas", or "Chlorine", as appropriate;

(b) With the common name of the compressed gas being transported; or

(c) Except as regards the marking "Chlorine", with the name of the carrier or his trade-mark, when and only when

such name or mark plainly indicates the nature of the cargo.

7.6052 Motor vehicles other than tank motor vehicles. (See under Rule 7.1052.)

7.606 Shipping papers. (See Rule 7.106.)

7.607 Loading and unloading.¹⁰

7.60701 Buses. No motor carrier may transport any chlorine in or on any bus; or any other compressed gases in an amount exceeding an aggregate of 100 lbs. gross weight in or on a motor vehicle transporting passengers, provided, that this limitation as to quantity shall not apply to compressed gases carried as motor fuel in the fuel tanks of the vehicle, or to non-toxic, non-inflammable refrigerants used in the servicing operations of a motor carrier as set forth in Rule 7.10733.

7.60702 Floors or platforms essentially flat. Cylinders containing compressed gases shall not be loaded onto any part of the floor or platform of any motor vehicle which is not essentially flat; cylinders containing compressed gases may be loaded onto any motor vehicle not having a floor or platform only if such motor vehicle be equipped with suitable racks having adequate means for securing such cylinders in place therein. Nothing contained in this paragraph shall be so construed as to prohibit the loading of such cylinders on any motor vehicle having a floor or platform and racks as hereinbefore described.

7.60703 Transfers en route. No inflammable compressed gas shall be transferred from one container to another, or from one tank motor vehicle to another tank vehicle, or from another tank vehicle to a tank motor vehicle, on any public highway, street, or road, except in case of emergency. In such cases every precaution shall be taken to prevent the escape of gas. Red electric lanterns or flags shall be set out in the manner prescribed in Rules 2.23 and 2.24 of Part 2 of these regulations. All cargo tanks involved in such transfer shall be grounded. The transfer shall be made only during daylight, unless the emergency occurs at night or extends into hours of darkness and the hazard would be increased by waiting until daylight. In any such event, all practicable means, in addition to those hereinbefore prescribed, shall be taken to protect and warn other users of the highway against the hazard involved in any such transfer, or against the hazard occasioned by the emergency making such transfer necessary. Every precaution shall be taken to prevent the ignition or inflammation of any inflammable compressed gas from any source; and when it is possible to prevent the congregation of persons not directly concerned with the emergency, this shall be done. Every

¹⁰ For provisions regarding the loading of compressed gases with other dangerous articles see Rule 7.107 Section 7.1 of these regulations, and Table 7.1-1 in Appendix 7.1 hereof.

practicable precaution shall be taken to keep flames or fire away from the scene of the emergency and to prevent smoking or the lighting of pipes, cigars, or cigarettes. Similarly, special care shall be exercised in the operation of any engine, whether of the motor vehicles involved or any other, and where the operation of any such engine would be likely to produce ignition of the inflammable compressed gas, the transfer shall be accomplished by other means, if possible.

7.60704 Engine to be stopped. No inflammable compressed gas shall be loaded into or on or unloaded from any motor vehicle other than a tank motor vehicle, with the engine running.

7.60705 Prevent relative motion between containers. Cylinders and other individual containers of compressed gases not comprising cargo tanks shall be so loaded as to prevent relative motion thereof while in transit; and in any case, shall be loaded in such a manner that there will be the minimum likelihood of damage to valves or fittings of containers in the event of relative motion between them, or of other lading. Reasonable care shall be taken to prevent undue rise in temperature of containers and their contents during transit. There shall be no tampering with such containers or the contents thereof nor any discharge of the contents of any container containing chlorine between point of origin and point of billed destination. Discharge of contents of any container not forming a part or parts of a cargo tank shall not be made prior to removal from the motor vehicle.

7.60706 Cylinders horizontal. Cylinders containing compressed gases shall be loaded in a horizontal position unless packed in boxes or crates of such dimensions as to prevent their overturning, or unless loaded into racks securely attached to the motor vehicle, or unless so securely lashed in an upright position as to prevent their overturning.

7.60707 Use of engines in tank motor vehicles. No inflammable compressed gas shall be loaded into or on or unloaded from any tank motor vehicle with the engine running, unless the engine is used for the operation of a transfer pump. Unless the delivery hose is equipped with a shut-off valve at its discharge end, the engine of the motor vehicle shall be stopped at the finish of such loading or unloading operation while the filling or discharge connections are disconnected. Under no circumstances may any tank motor vehicle be left unattended during such a loading or unloading operation. For the purposes of this requirement, an attached delivery hose is deemed to be a part of the tank motor vehicle to which it is attached.

7.60708 Keep fire away. Extreme care shall be taken in the loading or unloading of any liquefied petroleum or

other inflammable compressed gas into or from any cargo tank to keep fire away and to prevent persons in the vicinity from smoking, lighting matches, or carrying any flame or lighted cigar, pipe or cigarette.

7.60709 Filling of individual containers comprising Type B cargo tanks. The filling of individual containers containing any compressed gas, whether liquefied or non-liquefied, or whether in solution or not, shall in each individual case, be in accordance with the requirements therefor as contained in the Shipping and Packing Regulations for Explosives and Other Dangerous Articles of this Commission.

7.60710 Filling of Type A cargo tanks with liquefied gases. The loading of liquefied gases into Type A cargo tanks shall be by weight or by suitable liquid level gage device. In either event the liquid portion of such gas shall not fill the tank at one hundred five degrees Fahrenheit (105° F.) if the tank be lagged, nor at one hundred thirty degrees Fahrenheit (130° F.) if the tank be unlagged. The quantity of any such liquefied petroleum gas loaded into such a cargo tank shall not exceed the quantities set forth in Table 7.6-1 of Appendix 7.6 for such loading, and the loading pressure shall not exceed the tank working pressure set forth on the metal plate specified in Rule 7.61141. If the gas has inflammable or toxic properties, its vapor pressure at one hundred thirty degrees Fahrenheit (130° F.) shall not exceed by more than twenty percent (20%) of the working pressure of the tank, and the safety valve setting shall be higher than that pressure. If such tanks are to be filled by weight, the gross weight shall be checked after the filling line is disconnected, in each instance. The gross weight shall be calculated from the tank capacity and tare weight set forth in Rule 7.61141 and the filling density corresponding to the material being loaded into the tank, as set forth in Table 7.6-1 in Appendix 7.6 of these regulations. If such tanks are to be filled by liquid level, each cargo tank, and each compartment thereof, shall have a thermometer well, so that the internal liquid temperature can easily be determined, and the amount of liquid in the tank shall be corrected to a sixty degree Fahrenheit (60° F.) basis. Liquid levels may be determined by slip gaging devices or by any other suitable and safe means. If a fixed dip tube or other fixed maximum liquid level device is the only such device provided on such a cargo tank, it shall be so arranged as to function at ninety-seven percent (97%) or less of the maximum permitted loading level prescribed in Table 7.6-1 of Appendix 7.6 of these regulations, and the loading shall be stopped when the device functions; although nothing contained in this provision shall be so construed as to prohibit the loading of any Type A cargo tank to a liquid level as prescribed in

Table 7.6-1 when an adjustable liquid level device is provided.

7.60712 No smoking. Smoking on or about any tank motor vehicle while loading or unloading any inflammable compressed gas is forbidden.

7.608 Driving.

7.6081 Care in passing fires. Motor vehicles transporting compressed inflammable gases shall not be driven past fires of any kind burning on or near the highway or other thoroughfare until after due caution shall have been taken to ascertain that such passing can be made with safety.

7.6082 Avoidance of congested places. Drivers of motor vehicles transporting inflammable, noxious, or toxic compressed gases in cargo tanks shall, so far as practicable, avoid driving into congested thoroughfares, places where crowds are assembled, street car tracks, tunnels, viaducts, and dangerous crossings. So far as possible, this shall be accomplished by prearrangement of routes.

7.6083 Reduce refuelings to minimum. Except for fuel containers for Diesel engine fuels, the fuel tank, tanks, or other containers on any motor vehicle in which is to be transported any compressed gas, or which is to furnish the motive power for any such transportation, shall be suitably filled prior to the commencement of transportation of any such compressed gas. Subsequent to the commencement of any such transportation, fuel containers shall be suitably filled on each occasion at which it is necessary or expedient to refuel, unless a partial refilling would suffice to carry the motor vehicle or combination of motor vehicles to its final destination. Fuel containers shall not be refilled a greater number of times than is requisite for the transportation. If the engine is provided with an electrical ignition system, it shall be turned off and the engine stopped during the refueling process; and if with a magneto, it shall be grounded. So far as liquefied petroleum gases are concerned, the words "suitably filled" shall be construed to mean filling in accordance with Table 7.6-1 in Appendix 7.6 of these regulations.

7.6086 Stopping. Whenever any motor vehicle transporting compressed gases is disabled upon the traveled portion of any highway or shoulder next thereto, or where prudence indicates the wisdom of stopping for a period of time though not disabled, except within the corporate limits of municipalities, the following requirements shall be complied with during the period of such stop:

(a) For motor vehicles transporting compressed gases other than inflammable compressed gases in cargo tanks, flares (pot torches), fusees, red electric lanterns, and flags shall be displayed as required under Rules 2.23 and 2.24 of Part 2 of these regulations.

(b) For motor vehicles used for the transportation of inflammable compressed gases in cargo tanks, whether loaded or empty, red electric lanterns

and flags shall be displayed as required in Rules 2.232 and 2.234 and under Rule 2.24 of Part 2 of these regulations.

7.609 Handling and disposition of containers found leaking in transit. (See Rule 7.109.)

7.610 Parking in congested places. No rule.

7.611 Design and construction.

7.6111 Existing tank motor vehicles continuing in service.

7.61111 Specification tank motor vehicles. Tank motor vehicles used for the transportation of compressed gases which shall have been in service prior to June 15, 1940, may be continued in service provided they have been designed and constructed in accordance with the A S M E Code for Unfired Pressure Vessels or in accordance with the requirements of the A P I—A S M E Code for Unfired Pressure Vessels for Petroleum Liquids and Gases.

7.61112 Non-specification tank motor vehicles. Tank motor vehicles used for the transportation of compressed gases not meeting the requirements set forth in Rule 7.61111 which shall have been in service prior to June 15, 1940, may be continued in service provided they fulfill the requirements set forth under Rule 7.612 and are and can be maintained in safe operation condition, but in any event they shall be equipped with at least the accessories as specified in items 7.6-S-1.2082, 7.6-S-1.2083, 7.6-S-1.2084, 7.6-S-1.2085, and 7.6-S-1.214 of Specification 7.6-S-1.2 of Appendix 7.6 of these regulations.

7.6112 New tank motor vehicles. Except as provided in Rule 7.6113 every new tank motor vehicle acquired by a motor carrier on or after June 15, 1940, for the transportation of any compressed gas shall comply with the requirements of Specification 7.6-S-1 of Appendix 7.6 of these regulations. A certificate from the manufacturer of the cargo tank, or from a competent testing agency, certifying that each such tank motor vehicle is designed and constructed in accordance with the requirements of Specification 7.6-S-1 shall be procured, and such certificate shall be retained in the files of the carrier during the time that such tank motor vehicle is employed in the transportation of compressed gases by him. In lieu of this certificate, if the motor carrier himself elects to ascertain if any such tank motor vehicle fulfills the requirements of Specification 7.6-S-1 by his own test, he shall similarly retain the test data.

7.6113 Novel tank motor vehicles—special authorization. The Commission may, upon written request for such authorization by a motor carrier, authorize the use of limited numbers, and for limited times, of new tank motor vehicles which fail to meet the requirements of Specification 7.6-S-1. In the event of such request for authorization, the carrier shall furnish those details concerning the design and construction of the tank

motor vehicle as seem necessary for the determination of its ability safely to transport compressed gases.

7.6114 Marking of cargo tanks.

7.61141 *Metal identification plate.* On the right side, near the front, and in a place readily accessible for inspection there shall be on every cargo tank a metal plate. This plate shall be permanently affixed by means of soldering, brazing, or welding, or other suitable means; and upon it shall be marked by stamping, embossing, or other means of forming letters into or on the metal of the plate itself, in the manner illustrated below, at least the information indicated below. The plate shall not be so painted as to obscure the markings thereon.

CARRIER'S SERIAL NUMBER¹⁷
MANUFACTURER'S NAME¹⁸
DATE OF MANUFACTURE¹⁸
I C C 7.6-S-1¹⁹
CAPACITY²⁰
TARE WEIGHT²⁰
WORKING PRESSURE

7.61142 *Test date markings.* The date of the last test or retest required by these regulations and the due date of the next required routine test or retest shall be painted on the tank in letters not less than one and one quarter inches (1¼") high, in legible colors, immediately below the metal identification plates specified in Rule 7.61141.

7.61143 *Certification by markings.* The markings specified in Rules 7.61141 and 7.61142 shall serve to certify that the information thereby set forth is correct.

7.6115 *Painting of cargo tanks.* On and after June 15, 1942, every cargo tank permanently attached to a tank motor vehicle in which is to be transported any liquefied petroleum gas shall, unless it be constructed of aluminum, stainless steel, or other bright, non-tarnishing metal, be painted all over a white, aluminum, or similar reflecting color. Nothing contained in this rule shall be so construed as to prohibit the lettering of the carrier's name and/or trademark or the lettering or attachment of signs required by these regulations: *Provided, however,* That no such sign or lettering on any such tank shall exceed in aggregate area twenty percent (20%) of the projected area of either side, or thirty percent (30%) of the area of either end.

¹⁷ Carriers are not required to number their tanks serially; any designation regularly used by the carrier to identify the tank may be put in this space.

¹⁸ In the event the identity of the tank manufacturer or the date of manufacture is not known and cannot be ascertained the spaces indicated shall be marked "Make Unknown" and/or "Date of Manufacture Unknown".

¹⁹ Substitute "A S M E Code", or "A P I—A S M E Code", or "No Specification", if appropriate.

²⁰ Tank capacity is to be specified in pounds of water; tare weight may be omitted if tank is to be charged by liquid level gaging device or by pressure gage; "pressure" is the maximum allowable charging pressure of the tank, pounds per square inch gage.

7.612 Inspection and maintenance.

7.6121 *No hazardous repairs on loaded motor vehicles.* None of the repairs required by Part 6 of these regulations to be made, nor any other repairs, shall be performed on any motor vehicle containing any inflammable compressed gas, nor on a cargo tank used for the transportation of any such gas, whether empty or loaded, except in such cases that such repair can be made without hazard; nor shall any such loaded motor vehicle be repaired in a closed garage.

7.6122 *No repair with flame unless gas-free.* No repair of a cargo tank used for the transportation of any inflammable compressed gas, nor of any container for fuel of whatever nature, may be repaired by any method employing a flame, arc, or other means of welding, unless such space shall first have been made gas-free.

7.6123 *Times of retesting of Type A cargo tanks.* Every cargo tank used for the transportation of any compressed gas shall be tested or retested as follows:

7.61231 *Tanks out of service one year or more.* Every Type A cargo tank which has been out of transportation service for a period of one year or more shall not be returned to or placed in such service until it shall successfully have fulfilled the requirements set forth under Rule 7.6124.

7.61232 *Non-specification tanks.* Every Type A cargo tank not complying with the requirements of the A.S.M.E. Code for Unfired Pressure Vessels, with the A.P.I.—A.S.M.E. Code for Unfired Pressure Vessels for Petroleum Liquids and Gases, or with Specification 7.6-S-1 of Appendix 7.6 of these regulations shall be tested at least once in every calendar year and shall successfully fulfil the requirements set forth under Rule 7.6124. No two such required tests shall be closer together than six (6) months.

7.61233 *Specification tanks.* Every Type A cargo tank complying with the requirements of the A.S.M.E. Code for Unfired Pressure Vessels, with the A.P.I.—A.S.M.E. Code for Unfired Pressure Vessels for Petroleum Liquids and Gases, or with Specification 7.6-S-1 of Appendix 7.6 of these regulations shall be tested at least once in every five-year period. If tested no oftener than once in every five years, at least one such test shall be made in the last year of any such five-year period. The time of reckoning for such testing of such cargo tanks shall be from the time of the last test made in accordance with the requirements set forth under Rule 7.6124; and if no such tests have ever been made, such tanks shall be tested within six (6) months after June 15, 1940.

7.61234 *Novel cargo tanks.* Every cargo tank which shall have been authorized by this Commission to transport compressed gases under the provisions of Rule 7.6113 shall be tested under requirements specifically set forth in the terms of such authorization.

7.61235 Testing following accidents.

Every cargo tank capable of suitable repair following any accident in which a tank motor vehicle may have been involved shall be retested in accordance with the requirements set forth under Rule 7.6124, if the cargo tank has itself been damaged in a manner likely to affect the safety of operation of the tank motor vehicle, or if the damage to the tank motor vehicle is such as to make the safety of the cargo tank uncertain.

7.61236 *Special testing required by this Commission.* Upon the showing of probable cause of the necessity for retest, the Commission may, in its discretion, cause any cargo tank to be retested in accordance with the requirements of Rule 7.6124 at any time.

7.6124 *Method of testing.* Every Type A cargo tank shall be tested in accordance with the requirements for testing and retesting in either the requirements for testing and retesting set forth in the A.S.M.E. Code for Unfired Pressure Vessels or in the A.P.I.—A.S.M.E. Code for Unfired Pressure Vessels for Petroleum Liquids and Gases.

7.6125 *Testing of Type B cargo tanks.* The testing of tank containers, cylinders, or other containers comprising Type B cargo tanks shall be in accordance with the requirements contained in the Regulations for Shippers of the Commission.

7.613 Accidents.

7.6131 *Disposal of leaking inflammable gases.* In the event of any accident involving any motor vehicle transporting any compressed gas in which a cargo tank, compartment or other component part thereof, or any individual package may be leaking, all possible means shall be taken to prevent fire, explosion, or other hazard peculiar to any such compressed gas.

7.6133 *Warning.* In the event of an accident involving any motor vehicle transporting any compressed gas, the release of which would constitute a hazard to other users of the highway, due care shall be taken that only persons employed in the removal of hazards or wreckage shall be allowed in proximity to the motor vehicle. In such cases, every practicable and available means shall be taken to warn all approaching persons of the danger involved and to caution them against the use of matches or flame-producing devices, if the gas is inflammable, or against any other hazard peculiar to the properties of the compressed gas being transported.

SECTION 7.7—POISONS ARRANGEMENT OF RULES

Rule	Definitions.
7.700	Poison.
7.70011	Extremely dangerous poison—Class A.
7.70012	Less dangerous poison—Class B.
7.70013	Tear gases and irritating substances—Class C.
7.701	Application of rules.
7.702	Vehicle tunnels.
7.703	Compliance required.
7.704	Packages.
7.705	Marking on motor vehicles.
7.706	Shipping papers.

Rule	
7.707	Loading and unloading.
7.7071	Poisons on busses.
7.7074	Outage.
7.7076	Poisonous solids in bulk.
7.7077	Arsenical compounds in bulk.
7.7078	Gaseous poisons.
7.708	Driving.
7.709	Handling and disposition of containers found leaking in transit.
7.710	Parking in congested places.
7.711	Design and construction.
7.712	Inspection and maintenance.
7.713	Accidents.

7.700 Definitions.

7.7001 Poison.

7.70011 *Class A—Extremely dangerous poison—Poison gas label.* Poisonous gases or liquids of such nature that a very small amount of the gas, or vapor of the liquid, mixed with air, is dangerous to life. This class includes the following:

Acid, hydrocyanic (prussic).

(Dilute solutions of hydrocyanic acid not exceeding 5 percent strength are classed as poisonous articles, Class B.)

Bromacetone.

Carbonyl chloride (phosgene).

Chlorpicrin.

Cyanogen.

Mustard gas.

Xylol bromide.

7.70012 *Class B—Less dangerous poisons—Poison label.* Poisonous liquids or solids of such nature that they are chiefly dangerous by external contact with the body or by their being taken internally, as in contaminated foods or feeds.

The vapors of some of this class of materials are also offensive or dangerous, but to a much less extent than class A poisons.

Any poisonous material not described in Rule 7.70011 which has a toxicity greater than 22 milligrams per kilo body would fall within this group.

7.70013 *Class C—Tear gases or irritating substances—Tear gas label.* Liquid or solid substances which upon contact with fire give off dangerous or intensely irritating fumes, such as brombenzylcyanide, chloracetophenone, diphenylaminechlorarsine, and diphenylchlorarsine, but not including any poisonous article, class A.

7.701 Application of rules. For any poison which comes also within the scope of the definition of any of the classes of compressed gases as set forth in Rule 7.6001 of Section 7.6 of these regulations, the requirements shall be no less stringent than those for any such gases as set forth in Section 7.6 of these regulations, for compressed gases. (See also Rule 7.101)

7.702 Vehicular tunnels. (See Rule 7.102)

7.703 Compliance required. (See Rule 7.103)

7.704 Packages. No motor carrier may accept for transportation or transport any liquid "less dangerous poison, Class B" in a cargo tank not complying with the requirements set forth under Rule 7.711 of these regulations. (See also Rule 7.104)

7.705 Marking on motor vehicles. (See also Rule 7.105)

7.7051 *Tank motor vehicles.* Every tank motor vehicle used for the transportation of any less dangerous poison, Class B (see Rule 7.7074 prohibiting the transportation of Class A or Class C poisons in Type A cargo tanks), regardless of the quantity being transported, or whether loaded or empty, shall be conspicuously and legibly marked on each side and the rear thereof in letters at least three inches (3") high on a background of a sharply contrasting color, optionally as follows:

(a) With a sign or lettering on the motor vehicle with the word "Poison"; or

(b) With the common name of the Class B poison being transported.

7.7052 *Motor vehicles other than tank motor vehicles.* (See Rule 7.1052)

7.706 Shipping papers. (See Rule 7.106)

7.707 Loading and unloading²¹.

7.7071 *Poisons on buses.* No motor carrier may transport any "extremely dangerous poison—Class A", any "tear gases or irritating substances—Class C", any "less dangerous poison—Class B" which is a liquid, nor any paranitraniline, in any amount, in or on any bus while engaged in the transportation of passengers; nor any "less dangerous poison—Class B" which is other than a liquid, in an amount exceeding an aggregate of one hundred pounds (100 lbs.) gross weight in or on any such bus.

7.7072 *No Class A or Class C poisons in Type A cargo tanks.* No "extremely dangerous poison—Class A", nor any "tear gases or irritating substances—Class C" may be loaded into or transported in any Type A cargo tank.

7.7073 *Class A or Class C poisons in Type B cargo tanks.* "Extremely dangerous poisons—Class A", and "tear gases and irritating substances—Class C" may be transported in Type B cargo tanks only if each of the containers comprising the cargo tank be those prescribed in the Shipping and Packing Regulations for Explosives and Other Dangerous Articles of this Commission; it shall not be permissible to transport such articles in such containers comprising a Type B cargo tank if there be any interconnecting means of any character.

7.7074 *Outage.* No Type A cargo tank or compartment thereof used for the transportation of any liquid poison shall be completely filled; sufficient space shall be left vacant in every case to prevent leakage from or distortion of any such cargo tank by expansion of the contents due to rise in temperature in transit, and such free space (outage) shall be sufficient in every case so that such cargo tank shall not become entirely filled with the liquid at one hundred

thirty (130° F.). Containers comprising Type B cargo tanks shall be filled in accordance with the Regulations for Shippers of this Commission.

7.7075 *Use of tools.* No tools which are likely to damage the effectiveness of the closure of any package or other container, or likely adversely to affect such package or container, shall be used for the loading or unloading of any poisonous articles.

7.7076 *Poisonous solids in bulk.* Care shall be exercised in the loading and unloading of any poisonous solid allowable to be loaded in bulk, not to load such solids in such a manner or in such quantities as to produce undue spontaneous heating.

7.7077 *Arsenical compounds in bulk.* Care shall be exercised in the loading and unloading of arsenical compounds, such as lead arsenate, calcium arsenate or arsenical mixtures or dusts, allowable to be loaded into sift-proof, steel hopper-type or dump type motor vehicle bodies equipped with water-proof, dust-proof covers well secured in place on all openings, to accomplish such loading with the minimum spread of such compounds into the atmosphere, by all means that are practicable; and no such loading or unloading shall be done near or adjacent to any place where there are or are likely to be, during the loading or unloading process, assemblages of persons other than those engaged in the loading or unloading process, or upon any public highway or in any public place.

7.7078 *Gaseous poisons.* For any compressed gas which comes within the scope of any of the definitions of poisonous articles as set forth in this Section, the loading and unloading requirements shall be no less stringent than those coming under Rule 7.607 in Section 7.6 of these regulations, for compressed gases.

7.708 Driving.

7.7081 *Inflammable liquid poisons.* For liquid poisons coming within the scope of the definition of "Inflammable Liquid" the requirements for driving shall be the same, except as otherwise noted in this Section, as those set forth under the caption "Driving" in Section 7.3 of these regulations (Rule 7.308).

7.7082 *Compressed poisonous gases.* For any compressed gas which comes within the scope of the definition of any of the classes of poisonous articles as set forth in this Section, the requirements shall be no less stringent than those coming under the caption "Driving" in Section 7.6 of these regulations, for compressed gases. (Rule 7.608).

7.7086 *Stopping.* Whenever any motor vehicle transporting any poison is disabled upon the traveled portion of any highway or a shoulder next thereto, or where prudence indicates the wisdom of stopping for a period of time though not disabled, except within the corporate limits of municipalities, the following requirements shall be complied with during the period of such stop:

²¹ For provisions regarding the loading of poisons with other dangerous articles see Rule 7.107 of Section 7.1 of these regulations and Table 7.1-3 in Appendix 7.1 hereof.

TABLE 71-1.—Loading Table—Continued

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
Low explosives or black powder																										
High explosives																										
Initiating or priming explosives																										
Wet: Diazodinitrophenol, fulminate of mercury, guanyl nitrosamine, guanidine, nitro manure, nitroguanidine, pentacyantrite, tetranitrate, tetraxene																										
Blasting caps, with or without safety fuse (including electric blasting caps)																										
Ammunition for cannon with explosive projectiles or incendiary projectiles, armor-piercing bullets																										
Explosive projectiles, bombs, torpedoes, or mines; rifle or hand grenades (explosive)																										
Detonating fuzes, boosters (explosive)																										
Ammunition for cannon with empty, sand loaded or solid projectiles, or without projectiles																										
Smokeless powder for cannon or smokeless powder for small arms																										
Fireworks																										
Small arms ammunition																										
Primers for cannon or small arms, empty cartridge bags—black powder, primed, empty cartridge shells, primed, empty grenades, primed, combination primers or percussion caps																										
Percussion fuzes or tracer fuzes																										
Time or combination fuzes																										
Cordeau detonant, safety squibs, fuse lighters, fuse igniters, delay electric igniters, electric squibs, or instantaneous fuse																										
Other dangerous articles:																										
Inflammable liquids or compressed inflammable gases, red label																										
Inflammable solids or oxidizing materials, yellow label																										
Acids or corrosive liquids, white label																										
Compressed noninflammable gases, green label																										
Poisonous gases or liquids, in cylinders, poison gas label																										
Less dangerous explosives:																										
Ammunition for cannon with empty, sand loaded or solid projectiles, or without projectiles																										
Smokeless powder for cannon or smokeless powder for small arms																										
Fireworks																										
Small arms ammunition																										
Primers for cannon or small arms, empty cartridge bags—black powder, primed, empty cartridge shells, primed, empty grenades, primed, combination primers or percussion caps																										
Percussion fuzes or tracer fuzes																										
Time or combination fuzes																										
Cordeau detonant, safety squibs, fuse lighters, fuse igniters, delay electric igniters, electric squibs, or instantaneous fuse																										
Other dangerous articles:																										
Inflammable liquids or compressed inflammable gases, red label																										
Inflammable solids or oxidizing materials, yellow label																										
Acids or corrosive liquids, white label																										
Compressed noninflammable gases, green label																										
Poisonous gases or liquids, in cylinders, poison gas label																										

1 Acids or corrosive liquids, white label, shall not be loaded above or adjacent to inflammable solids or oxidizing materials, yellow label.

2 Cyanides and cyanide mixtures must not be loaded with corrosive liquids.

NOTE: Charged electric storage batteries must not be loaded in the same motor vehicles with dangerous explosives, class A.

TABLE 7.1-2.—Alphabetical List of Explosives and Other Dangerous Articles

[Articles designated by the symbol (*) are doubtful articles which may or may not be classified as dangerous articles depending upon whether or not in each several instance they fall within the terms of the definitions in the regulations for each such class of article. If not classed as dangerous, such articles are not subject to the regulations]

[The number given in this table refers to the number given in the "Requirements List"—Table 7.1-3]

Name of article:	No.
Acetaldehyde	56
Acetic acid	204
Acetic anhydride	203
Acetone	57
Acetyl chloride	187
Acetone	57
Acid, carbolic, fused	300
Acid, carbolic, liquid	303
Acid, carbolic, solid	300
Acid, carboys, empty, as described	380
Acid, chlorosulphonic	205
Acid, electrolyte	206, 207
Acid, electrolyte, with battery charger or radio current supply device	222
Acid, formic	230
Acid, hydriodic	231
Acid, hydrobromic	232
Acid, hydrochloric (muriatic)	208
Acid, hydrocyanic (prussic)	272
Acid, hydrocyanic solutions	306
Acid, hydrofluoric	209
Acid, hydrofluosilicic	210
Acid, nitrating (mixed acid)	211
Acid, nitric	212
Acid, perchloric	213
Acid, sludge	214
Acid, spent, mixed	215
Acid, spent, sulfuric	216
Acid, sulfuric (oil of vitriol)	189
Acid, sulfuric, in fire extinguishers	235 (a)
Acrolein	273
Aeroplane bombs	25
Aeroplane flares	39
Air, compressed	240
Alcohol	58
Alcohol, denatured	59
Alcohol, wood (methanol)	60
Alfalfa feed	349
Alkaline corrosive liquids	217
Ammonium nitrate	165
Ammonium perchlorate	132
Ammonium picrate	15, 84, 136, 235
Ammonium picrate, wet	171
Ammunition, chemical, explosive	22, 335
Ammunition, chemical, nonexplosive	271, 312, 335
Ammunition for cannon, nonexplosive	35-38
Ammunition for cannon with explosive projectiles	1
Ammunition for cannon with empty projectiles	36
Ammunition for cannon with gas projectiles	30
Ammunition for cannon with incendiary projectiles	29
Ammunition for cannon with sand loaded projectiles	37
Ammunition for cannon with smoke projectiles	28
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GENERAL REQUIREMENTS AND EXEMPTIONS FOR ALL EXPLOSIVES AND OTHER DANGEROUS ARTICLES

1. Containers and markings which are referred to in the "Requirements list" are those for which requirements are given in the "Interstate Commerce Commission Regulations for the Transportation of Explosives and Other Dangerous Articles in Freight, Express and Baggage Services including Specifications for Shipping Containers" Revised, Effective October 1, 1930, and Amendments thereto.

2. Motor carriers may also accept for transportation and transport specification shipping containers authorized as outside containers, except those containing corrosive liquids (electrolyte or corrosive battery fluid under certain conditions not excepted) when tightly packed in boxes, barrels, or crates, complying with carrier's governing tariff and bearing the following markings:

- Prescribed name of contents.
- Prescribed label or words, "No label required" as required for the specification container.
- The words "This Side Up" when such marking is required on the specification container. Inside containers must be packed with their filling holes up.
- The outside container must also be marked "Inside Packages Comply with Prescribed Specifications" unless the inside packages are in crates, through the openings of which the specification markings are visible.

3. Motor carriers may also accept for transportation and transport explosives or other dangerous articles, except poisons Class A or C or chemical ammunition, without labels when in truckload shipments to be unloaded by the consignee. When it is known that subsequent shipments of these packages in less-than-truckload quantities will probably be made by the consignee, the packages shall have attached thereto labels or be marked "No label required" as would be required for less-than-truckload shipments.

4. See also Rule 7.104 for additional general requirements and exemptions.

TABLE 7.1-3.—Requirements List

[Articles preceded in this list by an (*) are doubtful articles which may or may not be subject to the regulations depending upon its characteristics and hazards involved]

No.	Class and name (Package must be shipped under name listed in quotation marks)	Exemptions (See also under "Required label and marking on outside package")	Containers in which authorized to be transported: (Containers must bear an I. C. C. specification marking unless listed in this column as "No I. C. C. specification marking" but this does not preclude use of I. C. C. containers)	Required label and marking on outside package (In addition to name listed in first column)
DANGEROUS EXPLOSIVES				
CLASS A				
1	"Ammunition for cannon with explosive projectiles."		Wooden or metal containers (No I. C. C. specification marking).	Poison gas label (for ammunition with gas projectiles only).
2	"Ammunition for small arms with explosive bullets."		Wooden or metal containers (No I. C. C. specification marking).	"This side up."
3	Black powder and low explosives billed and marked as "Black powder" or "low explosives" and also under such names as: "Blasting powder," "Blasting explosive," "Pellet powder," "Rifle powder," "Blasting caps, more than 1000 caps, marked—" "Number of caps) blasting caps—handle carefully," "Number of caps) electric blasting caps—handle carefully," "Number of caps) blasting caps with safety fuse," "Detonating fuses—handle carefully," "Boosters (explosive)—handle carefully," Guanyl nitrosamino guanylidene hydrazine, marked "Wet guanyl nitrosamino guanylidene hydrazine—Dangerous."		Fiber boxes Metal kegs Wooden barrels, boxes, or kegs.	
4	"Blasting powder."			
5	"Blasting explosive."			
6	"Pellet powder."			
7	"Rifle powder."			
8	"Blasting caps, more than 1000 caps, marked—" "Number of caps) blasting caps—handle carefully," "Number of caps) electric blasting caps—handle carefully," "Number of caps) blasting caps with safety fuse," "Detonating fuses—handle carefully," "Boosters (explosive)—handle carefully," Guanyl nitrosamino guanylidene hydrazine, marked "Wet guanyl nitrosamino guanylidene hydrazine—Dangerous."		Wooden boxes.	
9	"Number of caps) blasting caps—handle carefully," "Number of caps) electric blasting caps—handle carefully," "Number of caps) blasting caps with safety fuse," "Detonating fuses—handle carefully," "Boosters (explosive)—handle carefully," Guanyl nitrosamino guanylidene hydrazine, marked "Wet guanyl nitrosamino guanylidene hydrazine—Dangerous."		Wooden boxes (No I. C. C. specification marking).	
10	"Number of caps) blasting caps with safety fuse," "Detonating fuses—handle carefully," "Boosters (explosive)—handle carefully," Guanyl nitrosamino guanylidene hydrazine, marked "Wet guanyl nitrosamino guanylidene hydrazine—Dangerous."		Metal barrels or drums. Wooden barrels or kegs.	
11	"Detonating fuses—handle carefully," "Boosters (explosive)—handle carefully," Guanyl nitrosamino guanylidene hydrazine, marked "Wet guanyl nitrosamino guanylidene hydrazine—Dangerous."		Metal barrels or drums. Wooden barrels or kegs.	
12	Guanyl nitrosamino guanylidene hydrazine, marked "Wet guanyl nitrosamino guanylidene hydrazine—Dangerous."		Metal barrels or drums. Wooden barrels or kegs.	
13	Diacetylnitrophenol marked "Wet—diacetylnitrophenol—Dangerous."		Metal barrels or drums. Wooden barrels or kegs.	
14	Fulminate of mercury, marked "Wet fulminate of mercury—Dangerous."		Metal barrels or drums. Wooden barrels or kegs.	

1 See Par. 7.1073 for regulations governing transportation of explosives and other dangerous articles on busses. Where article is permitted to be transported in a tank motor vehicle, for the particular type of tank motor vehicle which may be used see: Par. 7.311 for inflammable liquids; 7.511 for corrosive liquids; 7.611 for compressed gases; and 7.711 for poisons.

2 Samples of explosives (except blasting caps) may be transported, provided the samples do not exceed 8 ounces each and the total quantity in one outside package shall not exceed 50 pounds for freight motor vehicles and 10 pounds for all packages on busses. The package shall be marked and described by the name of the most dangerous explosive included.

No.	Class and name	Exemptions	Containers in which authorized to be transported	Required label and marking on outside package
15	High explosives billed as "High explosives" and marked "High explosives—Dangerous."	Picric acid, wet; ammonium picrate, wet; trinitrobenzene, wet; and trinitrophenol, wet, under 16 oz. net, marked and billed as "Drug," "Chemical," or "Medicine." Picric acid, dry; ammonium picrate, dry; trinitrobenzene, dry; 4 ounces or less, marked or billed "Drug," "Medicine," or "Chemical." (No I. C. C. specification marking required.)	Wooden boxes, barrels, or kegs. Fiber boxes or drums.	"This side up."
16	Lead styphnate marked "Wet lead styphnate—Dangerous."		Metal barrels or drums. Wooden barrels or kegs.	
17	Lead azide marked "Wet lead azide—Dangerous."		Metal barrels or drums. Wooden barrels or kegs.	
18	"Nitroglycerin, liquid"		May be carried by contract carriers only, in vehicles especially designed, see Paragraphs 7.2113 of these regulations.	
19	Nitro manille, marked "Wet, nitro-manille—Dangerous."		Metal barrels or drums.	
20	Nitrosoguanidine marked "Wet nitrosoguanidine—Dangerous."		Wooden barrels. Metal barrels or drums. Wooden barrels or kegs.	
21	Pentazerythrite tetranitrate marked "Wet pentazerythrite tetranitrate—Dangerous."		Metal barrels or drums.	
22	"Projectiles, explosive," and also marked and billed as— "Explosive torpedoes," "Explosive mines," "Explosive bombs," "Projectiles, gas (explosive)"		Wooden or metal boxes (No I. C. C. specification marking). Not required to be boxed if over 90 pounds each.	Poison gas label (for projectiles with gas projectiles only).
23	"Also the following, marked and billed accordingly— "Smoke projectiles" or "Ammunition for cannon with smoke projectiles," "Incendiary projectiles" or "Ammunition for cannon with incendiary projectiles," "Gas bombs" or "Ammunition for cannon with gas projectiles," "Smoke bombs," "Incendiary bombs," Gas grenades, smoke grenades, incendiary grenades, and chemical grenades marked and billed "Hand grenade" or "Rifle grenade," Tetrazeno marked "Wet tetrazeno—Dangerous" or "Wet guanyl nitrosamino guanyl tetrazeno (tetrazeno)."		Wooden or metal containers (No I. C. C. specification marking).	Poison gas label (on articles containing toxic gas).
24	"Explosive torpedoes,"			
25	"Explosive mines,"			
26	"Explosive bombs,"			
27	"Projectiles, gas (explosive)"			
28	"Also the following, marked and billed accordingly— "Smoke projectiles" or "Ammunition for cannon with smoke projectiles," "Incendiary projectiles" or "Ammunition for cannon with incendiary projectiles," "Gas bombs" or "Ammunition for cannon with gas projectiles," "Smoke bombs," "Incendiary bombs," Gas grenades, smoke grenades, incendiary grenades, and chemical grenades marked and billed "Hand grenade" or "Rifle grenade," Tetrazeno marked "Wet tetrazeno—Dangerous" or "Wet guanyl nitrosamino guanyl tetrazeno (tetrazeno)."		Wooden or metal boxes (No I. C. C. specification marking).	Poison gas label (on articles containing toxic gas).
29	"Incendiary projectiles" or "Ammunition for cannon with incendiary projectiles,"			
30	"Gas bombs" or "Ammunition for cannon with gas projectiles,"			
31	"Smoke bombs,"			
32	"Incendiary bombs,"			
33	Gas grenades, smoke grenades, incendiary grenades, and chemical grenades marked and billed "Hand grenade" or "Rifle grenade,"		Wooden or metal boxes (No I. C. C. specification marking).	
34	Tetrazeno marked "Wet tetrazeno—Dangerous" or "Wet guanyl nitrosamino guanyl tetrazeno (tetrazeno)."		Metal barrels or drums. Wooden barrels or kegs.	

No.	Class and name	Exemptions	Containers in which authorized to be transported	Required label and marking on outside package	No.	Class and name	Exemptions	Containers in which authorized to be transported	Required label and marking on outside package
LESS DANGEROUS EXPLOSIVES									
CLASS B									
35	Ammunition for cannon without projectiles, or with non-explosive projectiles, marked and banded:		Metal or wooden containers (No I. C. C. specification marking).		51	"Instantaneous fuse"		Wooden boxes or barrels (no I. C. C. specification marking).	
36	"Ammunition for cannon without projectiles,"				52	"Primers" or marked and described as "Small-arms primers," "percussion caps," "Cannon primers," "Combination primers," "Empty cartridge shells, primed" and the following:		Wooden boxes (no I. C. C. specification marking).	
37	"Ammunition for cannon with empty projectiles,"				53	"Empty cartridge shells, primed" and the following:		No specification packages.	
38	"Ammunition for cannon with sand-loaded projectiles,"				54	"Empty grenades, primed."			
39	"Ammunition for cannon with solid projectiles,"				55				
40	"Fireworks—handle carefully. Keep fire away," and in addition, as further noted—"Firecrackers," "Salutes," "Flash salutes," "Sparklers," "Paper caps," "Paper cap ammunition for toy pistols," "Toy torpedoes," "Smokeless powder for cannon in water."		Fiber boxes. Mailing tubes. Wooden barrels or boxes.		56	INFLAMMABLE LIQUIDS			
41	"Smokeless powder for cannon (dry)."				57	Inflammable liquids named in those regulations to be packed and described as follows:	All articles are exempted (except casinghead and natural gasoline) if in inside containers of not over 16 ounces capacity each packed in outside packages. Gasoline samples for laboratory examination in fibreboard boxes—1 quart.	Carboys. Cylinders (except acetylene cylinders). Fiber boxes. Metal barrels or drums. Wooden barrels, boxes, or kegs. Tank motor vehicles. (Wooden barrels or kegs not permitted for casinghead gasoline). (In addition alcohol may be packed in metal tanks, 16 gal.; no I. C. C. specification marking when shipped by or for the United States Government for transporting natural history or laboratory specimens.)	Red label and also "This side up," for packages with inside containers and also certain articles must have required "Bung" labels except. For freightshipments only. Certain articles packed in inside containers of over 16 ounces capacity and less than 1 quart and "Paint, liquid," and the articles grouped there-with in the 1st column under numbers 102-115, inclusive, if not over 1 gallon each in inside glass or earthenware vessels or not over 5 gallons each if in metal cans all packed in specification outside containers marked and certified "No Label Required."
42	"Smokeless powder for small arms (dry), including "Fire extinguisher charges."	Charges containing 50 grains or less of smokeless powder.			58	"Acetaldehyde."			
43	"Smokeless powder for small arms in water."				59	"Alcohol, denatured."			
RELATIVELY SAFE EXPLOSIVES									
CLASS C									
44	Ammunition for small arms, marked and banded "Small arms ammunition," in addition, for tear gas cartridges, the marking "Tear gas cartridges."		Wooden or fiber boxes, or metal containers (no I. C. C. specification marking).		60	"Alcohol, wood, methanol."			
45	Blasting caps, 1,000 or less caps, marked—		Wooden boxes.		61	"Amyl acetate."			
46	"(Number of caps) blasting caps—handle carefully."				62	"Benzene."			
47	"(Number of caps) electric blasting caps—handle carefully."				63	"Benzol (benzene)."			
48	"(Number of caps) blasting caps with safety fuse,"				64	"Box toe gum."			
49	Cordeau detonant, banded accordingly and marked "Cordeau detonant—handle carefully,"				65	"Carbon remover, liquid."			
50	Fuses, marked and banded "Fuses," "Tracer fuses," "Combination fuses," "Time fuses," "Igniters—labeled and marked as "Delay electric igniters," "Electric squibs," "Fuse lighters," "Fuse igniters," "Safety squibs."				66	"Casinghead gasoline."			
					67	"Cement, leather."			
					68	"Cement, liquid, n. o. s."			
					69	"Cement, roofing, liquid."			
					70	"Cement, rubber, liquid."			
					71	"Cleaning fluid or liquid."			
					72	"Coal tar light oil."			
					73	"Coal tar naphtha."			
					74	"Coal tar oil."			
					75	"Colloidal."			
					76	"Cologne spirits (alcohol)."			
					77	"Columbian spirits (wood alcohol)."			
					78	"Compounds, cleaning, liquid."			
					79	"Compounds, typecleaning, liquid."			
					80	"Compounds vulcanizing, liquid."			
					81	"Crude oil, petroleum."			
					82	"Distillate."			
					83	"Dressing, leather."			
					84	"Drugs, chemicals, and medicines, liquid, n. o. s."			
					85	"Ether."			
					86	"Ethyl acetate."			
					87	"Ethyl aldehyde."			
					88	"Ethyl methyl ketone."			
					89	"Extracts, flavoring, liquid."			
					90	"Gas drips, hydro-carbon."			
					91	"Gasoline."			
					92	"Inflammable liquids n. o. s." (not named herein but having like character and hazard).			
					93	"Insecticide, liquid" (vermin exterminator).			
					94	"Leather bleach."			
					95	"Methyl acetate."			
					96	"Monochlorobenzol."			
					97	"Motor fuel, n. o. s."			
					98	"Naphtha."			
					99	"Naphtha distillate."			
					100	"Natural gasoline."			
					101	"Oil, described as "Oil, n. o. s."."			
						"Petroleum oil, n. o. s."."			

No.	Class and name	Exemptions	Containers in which authorized to be transported	Required label and marking on outside package
102	"Paint, liquid", including the following: "Bronzing liquid." "Compounds." "Lacquer removing," "reducing," and "thinning." "Paint removing," "reducing," and "thinning." "Paint driers." "Polishing liquid." "Varnish removing," "reducing," and "thinning." "Varnish driers." "Eradicators, paint, liquid." "Eradicators, grease, liquid." "Furniture stain." "Lacquer, base, liquid." "Metal polish, liquid." "Mortar stain, liquid." "Paint," "aluminum," "bronzing," and "gold." "Shellac, liquid." "Stove polish, liquid." "Wood filler, liquid." "Wood stain, liquid." "Varnish." "Peatane." "Petroleum naphtha." "Pyridine." "Proxymol solution." "Proxymol solvent, n. o. s." "Road asphalt, liquid." "Rum, denatured." "Solvent, n. o. s." "Tincture (colicene)." "Xylol (xylene)." Inflammable liquids named in these regulations and differing in packing and marking requirements from those listed above to be packed and marked as follows: "Carbon bisulphide (disulphide)." "Ethyl chloride." "Ethylene oxide"			
103	"Eradicators, paint, liquid."	Forbidden for express, except medicinal preparations.	Fiber boxes	Do.
104	"Eradicators, grease, liquid."	Forbidden for express, except medicinal preparations.	Metal barrels or drums.	Do.
105	"Furniture stain."	Forbidden for express, except medicinal preparations.	Wooden boxes, barrels, or kegs.	Do.
106	"Lacquer, base, liquid."	Forbidden for express, except medicinal preparations.	Tank motor vehicles.	Do.
107	"Metal polish, liquid."	Forbidden for express, except medicinal preparations.	Cylinders (except acetylene cylinders).	Do.
108	"Mortar stain, liquid."	Forbidden for express, except medicinal preparations.	Fiber boxes.	Do.
109	"Paint," "aluminum," "bronzing," and "gold."	Forbidden for express, except medicinal preparations.	Metal barrels or drums.	Do.
110	"Shellac, liquid."	Forbidden for express, except medicinal preparations.	Wooden boxes.	Do.
111	"Stove polish, liquid."	Forbidden for express, except medicinal preparations.	Tank motor vehicles.	Do.
112	"Wood filler, liquid."	Forbidden for express, except medicinal preparations.	Fiber boxes.	Do.
113	"Wood stain, liquid."	Forbidden for express, except medicinal preparations.	Wooden boxes.	Do.
114	"Varnish."	Forbidden for express, except medicinal preparations.	Tank motor vehicles.	Do.
115	"Peatane."	Forbidden for express, except medicinal preparations.	Fiber boxes.	Do.
116	"Petroleum naphtha."	Forbidden for express, except medicinal preparations.	Wooden boxes.	Do.
117	"Pyridine."	Forbidden for express, except medicinal preparations.	Cylinders, except acetylene cylinders.	Do.
118	"Proxymol solution."	Forbidden for express, except medicinal preparations.	Metal barrels or drums.	Do.
119	"Proxymol solvent, n. o. s."	Forbidden for express, except medicinal preparations.	Wooden boxes.	Do.
120	"Road asphalt, liquid."	Forbidden for express, except medicinal preparations.	Tank motor vehicles.	Do.
121	"Rum, denatured."	Forbidden for express, except medicinal preparations.	Cylinders (except acetylene cylinders).	Do.
122	"Solvent, n. o. s."	Forbidden for express, except medicinal preparations.	Fiber boxes.	Do.
123	"Tincture (colicene)."	Forbidden for express, except medicinal preparations.	Wooden boxes.	Do.
124	"Xylol (xylene)."	Forbidden for express, except medicinal preparations.	Tank motor vehicles.	Do.
125	Inflammable liquids named in these regulations and differing in packing and marking requirements from those listed above to be packed and marked as follows: "Carbon bisulphide (disulphide)." "Ethyl chloride." "Ethylene oxide"	Forbidden for express, except medicinal preparations.	Fiber boxes	Do.
126	"Carbon bisulphide (disulphide)."	Forbidden for express, except medicinal preparations.	Metal barrels or drums.	Do.
127	"Ethyl chloride."	Forbidden for express, except medicinal preparations.	Wooden boxes, barrels, or kegs.	Do.
128	"Ethylene oxide"	Forbidden for express, except medicinal preparations.	Tank motor vehicles.	Do.
129	"Nickel carbonyl" or "mixtures."	Forbidden for express, except medicinal preparations.	Wooden boxes.	Do.
130	"Nitrocellulose, wet, with alcohol or solvent," also the following marked and billed accordingly: "Nitrocellulose, wet, with alcohol or solvent," "Pyroxylin, nonfibrous, granular, wet with alcohol or solvent," "Lacquer base or lacquer chips, wet with alcohol or solvent." "Spirits of nitroglycerin"	Forbidden for express, except medicinal preparations.	Wooden boxes.	Do.
131	"Spirits of nitroglycerin"	Forbidden for express, except medicinal preparations.	Wooden boxes.	Do.

* Inflammable solids are designated as (I. S.); oxidizing materials as (O. M.).

INFLAMMABLE SOLIDS AND OXIDIZING MATERIALS*

Inflammable solids and oxidizing materials named in these regulations and having the same packing and marking requirements to be packed and marked as follows:

"Aluminum perchlorate" (O. M.).

"Barium chlorate" (O. M.).

"Bromates" (O. M.).

"Chlorates, n. o. s." (O. M.).

"Drugs, chemicals, and medicines" (I. S. or O. M.).

"Inflammable solids and oxidizing materials, n. o. s." (I. S. or O. M.).

"Magnesium, metallic, powdered" (I. S.).

"Nitrites" (O. M.).

"Permanganates" (O. M.).

"Potassium bromate" (O. M.).

"Potassium chlorate" (O. M.).

"Potassium perchlorate" (O. M.).

"Potash."

"Soda, chlorate of."

Inflammable solids and oxidizing materials whose packing and marking requirements differ from those listed above to be packed and marked as follows:

"Bags, nitrate of soda, empty" (I. S.).

"Barium peroxide" (binoxide, dioxide) (O. M.).

"Benzoyl peroxide" (I. S.).

"Burnt cotton" (I. S.).

"Calcium chlorite" (O. M.).

"Calcium phosphide" (I. S.).

"Charcoal," "wood," "granular," "crushed," "pulverized" (I. S.).

"Charcoal," "wood, lump" (I. S.).

"Charcoal, wood, screenings" (I. S.).

"Chromic acid" (O. M.).

"Cobalt resinate, precipitated" (I. S.).

"Fibers" or "Fabrics" "with animal" or "vegetable oil" (I. S.).

"Inflammable solids are designated as (I. S.); oxidizing materials as (O. M.)."

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"Inflammable solids are designated as (I. S.); oxidizing materials as (O. M.)."

No.	Class and name	Exemptions	Containers in which authorized to be transported	Required label and marking on outside package	No.	Class and name	Exemptions	Containers in which authorized to be transported	Required label and marking on outside package
158	"Laquer base" or "laquer chips," "dry" (I. S.).	Outside packages with inside containers of not over 1 lb. net weight each.	Metal barrels or drums. Wooden boxes.	Same as for Nos. 132-145, inc.	170	"Phosphorus, white or yellow" (I. S.).	No exemption.	Metal barrels or drums (articles in water). Tank motor vehicles. Wooden boxes.	Yellow label.
159	"Matches, strike-anywhere" (I. S.). Packages marked in English with name of importer, distributor, or manufacturer and brand and trade mark (I. S.).	No exemption.	Fiber boxes. Wooden boxes.	Yellow label.	171	"Picric acid, wet with not less than 10% water" (I. S.); "Ammonium picrate, wet with not less than 10% water" (I. S.); "Trinitrobenzene, wet, with not less than 10% water" (I. S.); "Trinitroethanol, wet, with not less than 10% water" (I. S.).	Outside packages with inside containers (No I. C. C. specification marking) 16 oz. net or less marked and billed as Drug, chemical, or medicine.	Do.	Do.
160	"Matches, strike-on-box" or "bulk," "with other articles" (I. S.).	do.	Must be packed in inside containers or wrappings to prevent ignition and then packed in outside containers (No I. C. C. specification marking).	Do.	172	"Potassium, metallic" (I. S.).	No exemption.	Metal barrels or drums. Fiber boxes.	Do.
161	"Match-tipped, self-lighting cigarettes" (I. S.).	do.	Fiber boxes.	Do.	173	"Potassium sulfide" (I. S.).	Crystallized material, non-hazardous, marked and billed as exempt.	Same as for Nos. 132-145, inc.	Same as for Nos. 132-145, inc.
162	"Motion-picture film," exposed or unexposed (I. S.).	Unexposed exempt for freight. Exposed not to be shipped by freight.	Fiber boxes. Metal cases or trunks. Wooden boxes.	Do.	174	"Pyroxylin plastics" (I. S.) also the following: "Box toe board" (I. S.).	Outside packages containing maximum of 1 lb.	Fiber boxes or drums. Wooden boxes.	Yellow label (for express shipments only).
163	"Motion-picture film, old and worn out" (I. S.).	No exemption.	Metal barrels, boxes, or drums.	Do.	175	"Pyroxylin plastic scrap" (I. S.) also the following: "Celluloid scrap," "Fibroid scrap," "Motion picture film scrap," "Photographic film scrap," "Pyroxylin scrap," "Viscoid scrap," "X-ray film scrap," "Zylonite scrap."	No exemption. Forbidden for express transportation except samples.	Wooden barrels, boxes, or kegs. Metal barrels or drums.	Yellow label.
164	"Motion-picture film, toy" (I. S.).	Toy motion-picture film outfits in fiber or wooden boxes and film pieces in metal boxes with other articles (No I. C. C. specification marking).	Wooden boxes. Metal barrels, boxes, or drums. Wooden boxes.	Do.	176	"Rubber scrap" or "rubber buffings" (I. S.).	Rubber scrap not ground, nonhazardous, no regulation herein for freight shipments.	Metal barrels or drums. Wooden boxes.	Same as for Nos. 132-145, inc.
165	"Nitrates" (O. M.) including the following: "Ammonium nitrate," "Barium nitrate," "Lead nitrate," "Nitro carbonyl nitrate," "Potassium nitrate," "Soda nitrate" (Chile), "Strontium nitrate" or "Nitrate of strontia."	Outside packages with inside containers of not over 1 lb. net each and for freight only: Fiber boxes; wooden boxes; kegs or barrels; metal cans or drums; no weight limit (No I. C. C. specification marking). Also, calcium nitrate, in bags; no weight limit and ammonium nitrate in bags; not over 105 lb. net.	Bags (No I. C. C. specification marking). In bulk.	Yellow label for bags.	177	"Rubber shoddy," "regenerated rubber," or "reclaimed rubber" (I. S.).	Dense homogeneous, nonporous sheets or rolls, nonhazardous, no regulations herein.	Metal barrels or drums. Wooden boxes.	Do.
166	Nitrocellulose, wet with water (I. S.) and the following: Nitrocellulose, wet with water, and nitroguanidine, wet with water to be marked and billed respectively "Wet nitrocellulose-20% water," "Wet nitrocellulose-20% water," "Wet nitroguanidine-20% water," "Phosphoric anhydride" (I. S.).	No exemption.	Metal barrels or drums. Wooden barrels, boxes, or bags.	Same as for Nos. 132-145, inc.	178	"Soda, chlorate of, wet" (O. M.).	No exemption.	Tank motor vehicles.	Yellow label.
167	"Phosphorus, amorphous, red" (I. S.).	No exemption.	Metal barrels or drums. Wooden barrels, boxes, or kegs.	Yellow label.	179	"Sodium chlorite" (O. M.).	do.	Metal barrels or drums. Wooden boxes.	Same as for Nos. 132-145, inc.
168	"Phosphorus pentachloride" (I. S.).	do.	Carboys. Wooden barrels, boxes, or kegs.	Do.	180	"Sodium hydrosulfite" (I. S.).	do.	Plywood drums. Wooden barrels, boxes, or kegs.	Same as for Nos. 132-145, inc.
169	"Phosphorus pentachloride" (I. S.).	do.	Carboys. Wooden barrels, boxes, or kegs.	Do.	181	"Sodium metallic" (I. S.).	do.	Metal barrels or drums. Wooden boxes.	Yellow label.
170	"Phosphorus, white or yellow" (I. S.).	No exemption.	Metal barrels or drums. Wooden boxes.	Yellow label.	182	"Sodium peroxide" (O. M.).	do.	Metal barrels or drums. Tank motor vehicles of sodium, fused, solid.	Do.
171	"Picric acid, wet with not less than 10% water" (I. S.); "Ammonium picrate, wet with not less than 10% water" (I. S.); "Trinitrobenzene, wet, with not less than 10% water" (I. S.); "Trinitroethanol, wet, with not less than 10% water" (I. S.).	Outside packages with inside containers (No I. C. C. specification marking) 16 oz. net or less marked and billed as Drug, chemical, or medicine.	Metal barrels or drums. Fiber boxes.	Do.	183	"Sodium picramate" (I. S.).	do.	Wooden barrels, boxes, or kegs.	Do.
172	"Potassium, metallic" (I. S.).	No exemption.	Metal barrels or drums. Fiber boxes.	Do.	184	"Sodium sulfide" (I. S.).	Crystallized material and fused solid in metal barrel or drum (I. C. C. specification) non-hazardous.	Fiber boxes. Metal barrels or drums. Wooden boxes.	Same as for Nos. 132-145, inc.
173	"Potassium sulfide" (I. S.).	Crystallized material, non-hazardous, marked and billed as exempt.	Wooden barrels, boxes, or kegs.	Yellow label.	185	"Zirconium, metallic" (I. S.).	No exemption.	Wooden boxes or kegs.	Yellow label.
174	"Pyroxylin plastics" (I. S.) also the following: "Box toe board" (I. S.).	Outside packages containing maximum of 1 lb.	Wooden barrels, boxes, or kegs.	Do.	186	"Zirconium, metallic" (I. S.).	do.	Wooden boxes.	Do.

No.	Class and name	Exemptions	Containers in which authorized to be transported	Required label and marking on outside package	No.	Class and name	Exemptions	Containers in which authorized to be transported	Required label and marking on outside package
187	CORROSIVE LIQUIDS Corrosive liquids named in these regulations to be packed and described as follows: "Acetyl chloride" "Acid, sulfuric" (Oil of vitriol). "Anhydrous liquid chlorides." "Antimony pentachloride." "Benzoyl chloride." "Chloride of phosphorus." "Phosphorus oxychloride." "Pyro sulphuric chloride." "Silicon chloride." "Silicon tetrachloride." "Sulphur chloride." "Tin tetrachloride." "Titanium tetrachloride, anhydrous." "Titanium tetrachloride, these regulations and differing in packing and marking requirements from those listed above to be packed and marked as follows: "Acetic anhydride".	Subject to regulations only if shipped by express.	Carboys (not authorized for tin tetrachloride, anhydrous). Metal barrels or drums. Wooden barrels, boxes, or kegs. Tank motor vehicles.	White label and "This side up" for packages with inside containers; or for freight only if in quantities of not over 5 pints in one outside package, certified and marked "No label required".	211	"Acid, nitric (mixed acid)."	No exemptions.	Metal barrels or drums. Tank motor vehicles.	White label.
188					212	"Acid, nitric"	do.	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs.	Do.
189					213	"Acid, perchloric"	do.	Tank motor vehicles. Carboys in boxes, barrels, or kegs. Wooden boxes.	Same as Nos. 187-202, inclusive.
190					214	"Acid, stodge"	do.	Do.	Same as Nos. 187-202, inclusive.
191					215	"Acid, spent mixed"	do.	Do.	
192					216	"Acid, spent sulfuric"	do.	Do.	
193					217	"Alkaline corrosive liquids" or "Corrosive battery fluid" including—	do.	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs.	
194					218	"Caustic potash, liquid."	Batteries in boxes, truckload lots, and also non-spillable batteries in boxes in less-than-truckload lots, also: (a) Batteries in motor vehicles. (b) Batteries removed from motor vehicles and shipped therewith when properly loaded, blocked and braced and protected from other articles. (c) Batteries shipped with automobile parts or assembly material when boxed or crated, and properly loaded, blocked and braced and protected from other articles.	Fiber boxes. Wooden boxes. Carton (no I. C. C. specification marking). Battery with case of impregnated rubber, asphaltum composition, wood, or steel, unboxed, battery terminals covered.	Same as for No. 207.
195					219	"Caustic potash, solution."			
196					221	"Caustic soda, liquid."			
197					222	"Caustic soda, solution."			
198					223	"Battery charger" or "Radio current supply device."	No exemptions.	Wooden barrels, boxes, or drums. Carboys. Metal barrels or drums. Wooden boxes. Carboys. Mailing tubes. Wooden barrels, boxes, or kegs.	White label. Same as Nos. 187-202, inclusive.
199					224	"Bromine"			
200					225	"Chloroacetyl chloride"			
201					226	"Chromic acid solution"			
202					227	"Compounds, cleaning liquid," and also the following: "Compounds," "lacquer," "paint," or "varnish removing liquid," "Compounds, vulcanizing."	Outside packages with maximum of 8 oz. of liquid (no I. C. C. specification marking).	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs. Tank motor vehicles.	Same as Nos. 187-202, and also "This side up".
203	CORROSIVE LIQUIDS Corrosive liquids named in these regulations to be packed and described as follows: "Acetyl chloride" "Acid, sulfuric" (Oil of vitriol). "Anhydrous liquid chlorides." "Antimony pentachloride." "Benzoyl chloride." "Chloride of phosphorus." "Phosphorus oxychloride." "Pyro sulphuric chloride." "Silicon chloride." "Silicon tetrachloride." "Sulphur chloride." "Tin tetrachloride." "Titanium tetrachloride, anhydrous." "Titanium tetrachloride, these regulations and differing in packing and marking requirements from those listed above to be packed and marked as follows: "Acetic anhydride".	Subject to regulations only if shipped by express.	Wooden boxes or barrels.	White label (for express shipments only). Do. Same as for Nos. 187-202, inc. Do. Same as for Nos. 187-202, inc. and in addition: If only 1 device per package or enclosing bottle with 8 ounces or less of liquid in fiber boxes (No I. C. C. specification marking) When certified and marked "No label required."	224	"Bromine"	No exemptions.	Wooden barrels, boxes, or drums. Carboys. Metal barrels or drums. Wooden boxes. Carboys. Mailing tubes. Wooden barrels, boxes, or kegs.	White label. Same as Nos. 187-202, inclusive.
204					225	"Chloroacetyl chloride"	do.	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs.	Same as Nos. 187-202, inclusive.
205					226	"Chromic acid solution"	do.	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs.	Do.
206					227	"Compounds, cleaning liquid," and also the following: "Compounds," "lacquer," "paint," or "varnish removing liquid," "Compounds, vulcanizing."	Outside packages with maximum of 8 oz. of liquid (no I. C. C. specification marking).	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs. Tank motor vehicles.	Same as Nos. 187-202, and also "This side up".
207					228	"Compounds, cleaning liquid," and also the following: "Compounds," "lacquer," "paint," or "varnish removing liquid," "Compounds, vulcanizing."	Outside packages with maximum of 8 oz. of liquid (no I. C. C. specification marking).	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs. Tank motor vehicles.	Same as Nos. 187-202, and also "This side up".
208					229	"Compounds, cleaning liquid," and also the following: "Compounds," "lacquer," "paint," or "varnish removing liquid," "Compounds, vulcanizing."	Outside packages with maximum of 8 oz. of liquid (no I. C. C. specification marking).	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs. Tank motor vehicles.	Same as Nos. 187-202, and also "This side up".
209	CORROSIVE LIQUIDS Corrosive liquids named in these regulations to be packed and described as follows: "Acetyl chloride" "Acid, sulfuric" (Oil of vitriol). "Anhydrous liquid chlorides." "Antimony pentachloride." "Benzoyl chloride." "Chloride of phosphorus." "Phosphorus oxychloride." "Pyro sulphuric chloride." "Silicon chloride." "Silicon tetrachloride." "Sulphur chloride." "Tin tetrachloride." "Titanium tetrachloride, anhydrous." "Titanium tetrachloride, these regulations and differing in packing and marking requirements from those listed above to be packed and marked as follows: "Acetic anhydride".	Subject to regulations only if shipped by express.	Wooden boxes or barrels.	White label (for express shipments only). Do. Same as for Nos. 187-202, inc. Do. Same as for Nos. 187-202, inc. and in addition: If only 1 device per package or enclosing bottle with 8 ounces or less of liquid in fiber boxes (No I. C. C. specification marking) When certified and marked "No label required."	224	"Bromine"	No exemptions.	Wooden barrels, boxes, or drums. Carboys. Metal barrels or drums. Wooden boxes. Carboys. Mailing tubes. Wooden barrels, boxes, or kegs.	White label. Same as Nos. 187-202, inclusive.
210					225	"Chloroacetyl chloride"	do.	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs.	Same as Nos. 187-202, inclusive.
211	CORROSIVE LIQUIDS Corrosive liquids named in these regulations to be packed and described as follows: "Acetyl chloride" "Acid, sulfuric" (Oil of vitriol). "Anhydrous liquid chlorides." "Antimony pentachloride." "Benzoyl chloride." "Chloride of phosphorus." "Phosphorus oxychloride." "Pyro sulphuric chloride." "Silicon chloride." "Silicon tetrachloride." "Sulphur chloride." "Tin tetrachloride." "Titanium tetrachloride, anhydrous." "Titanium tetrachloride, these regulations and differing in packing and marking requirements from those listed above to be packed and marked as follows: "Acetic anhydride".	Subject to regulations only if shipped by express.	Wooden boxes or barrels.	White label (for express shipments only). Do. Same as for Nos. 187-202, inc. Do. Same as for Nos. 187-202, inc. and in addition: If only 1 device per package or enclosing bottle with 8 ounces or less of liquid in fiber boxes (No I. C. C. specification marking) When certified and marked "No label required."	226	"Chromic acid solution"	do.	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs.	Do.
212					227	"Compounds, cleaning liquid," and also the following: "Compounds," "lacquer," "paint," or "varnish removing liquid," "Compounds, vulcanizing."	Outside packages with maximum of 8 oz. of liquid (no I. C. C. specification marking).	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs. Tank motor vehicles.	Same as Nos. 187-202, and also "This side up".
213	CORROSIVE LIQUIDS Corrosive liquids named in these regulations to be packed and described as follows: "Acetyl chloride" "Acid, sulfuric" (Oil of vitriol). "Anhydrous liquid chlorides." "Antimony pentachloride." "Benzoyl chloride." "Chloride of phosphorus." "Phosphorus oxychloride." "Pyro sulphuric chloride." "Silicon chloride." "Silicon tetrachloride." "Sulphur chloride." "Tin tetrachloride." "Titanium tetrachloride, anhydrous." "Titanium tetrachloride, these regulations and differing in packing and marking requirements from those listed above to be packed and marked as follows: "Acetic anhydride".	Subject to regulations only if shipped by express.	Wooden boxes or barrels.	White label (for express shipments only). Do. Same as for Nos. 187-202, inc. Do. Same as for Nos. 187-202, inc. and in addition: If only 1 device per package or enclosing bottle with 8 ounces or less of liquid in fiber boxes (No I. C. C. specification marking) When certified and marked "No label required."	228	"Compounds, cleaning liquid," and also the following: "Compounds," "lacquer," "paint," or "varnish removing liquid," "Compounds, vulcanizing."	Outside packages with maximum of 8 oz. of liquid (no I. C. C. specification marking).	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs. Tank motor vehicles.	Same as Nos. 187-202, and also "This side up".
214					229	"Compounds, cleaning liquid," and also the following: "Compounds," "lacquer," "paint," or "varnish removing liquid," "Compounds, vulcanizing."	Outside packages with maximum of 8 oz. of liquid (no I. C. C. specification marking).	Carboys. Metal barrels or drums. Wooden barrels, boxes, or kegs. Tank motor vehicles.	Same as Nos. 187-202, and also "This side up".

No.	Class and name	Exemptions	Containers in which authorized to be transported	Required label and marking on outside package	No.	Class and name	Exemptions	Containers in which authorized to be transported	Required label and marking on outside package
230	Corrosive liquids named in these regulations to be packed and described as follows: "Acid, formic." "Acid, hydrochloric." "Acid, hydrobromic." "Corrosive liquids, n. o. s." "Dimethyl sulphate"	Outside packages with maximum of 8 oz. of liquid (no I. C. C. specification marking).	Carboys Metal barrels or drums, wooden barrels, boxes, or kegs.	Same as Nos. 187-202, and also "This side, up".	232	"Helium" (liquefied or non-liquefied).	If in cylinders or tubes, maximum outside diameter 2 in. and maximum capacity 4 fluid oz. (No. I. C. C. specification marking).	Cylinder	Green gas label.
231					233	"Hydrocarbon gas" (liquefied)	do.	Same as for "Liquefied petroleum gas".	Red gas label.
232					234	"Hydrocarbon gas" (non-liquefied).	do.	do.	Do.
233					235	"Hydrogen" (non-liquefied)	do.	do.	Do.
234		No exemptions	Metal drums, wooden boxes, metal drums in crates (no I. C. C. specification marking).	White label.	236	"Hydrogen sulfide" (liquefied)	do.	do.	Do.
235	"Drugs and chemicals"	do.	Wooden barrels or boxes.	Same as for Nos. 187-202.	237	"Liquefied carbon dioxide" (liquefied).	do.	do.	Green gas label.
235a	"Fire-extinguisher charges": "acid, sulphuric"	8 fluid oz. bottle packed with bicarbonate of soda, or 10 oz. bottle in carton, cushioned with potassium carbonate, or in addition alkali in tin can. (No I. C. C. specification marking.)	No I. C. C. specification marking.		238	"Liquefied petroleum gas" (liquefied).	do.	Metal drums, tank motor vehicles, cylinders.	Red gas label.
		2 oz. bottle in double metal containers, cushioned with asbestos and potassium carbonate. (No I. C. C. specification marking.)	Do.		239	"Methyl chloride" (liquefied)	do.	do.	Do.
235b	"Hydrogen peroxide (diluted) containing over 7.41% (25 volume) H_2O_2 "	No exemption	Aluminum drums, carboys, wooden boxes or barrels.	Same as for Nos. 187-202, and also top head of aluminum drums to be marked "This side up."	240	"Monomethylamine" (liquefied).	do.	do.	Do.
236	"Phosphorus tribromide"	do.	Tank motor vehicles (not subject to regulations herein).	Same as for Nos. 187-202.	241	"Nitrogen" (non-liquefied)	do.	do.	Do.
237	"Phosphorus trichloride"	do.	Metal barrels or drums, wooden barrels, boxes, or kegs.	White label.	242	"Nitrogen oxide" (liquefied)	do.	do.	Do.
238	"Sulfur trioxide"	do.	Carboys, wooden barrels, boxes or kegs.	Same as for Nos. 187-202.	243	"Oxygen" (non-liquefied)	do.	do.	Do.
239	COMPRESSED GASES "Acetylene" (absorbed) ⁴	If in cylinders or tubes, maximum outside diameter 2 in. and maximum capacity 4 fluid oz. (No I. C. C. specification marking).	Cylinders (acetylene cylinders only).	Red gas label. ¹	244	"Pinsch" (non-liquefied)	do.	do.	Red gas label.
240	"Air, compressed" (non-liquefied).	do.	Cylinders	Green gas label.	245	"Propylene" (liquefied)	do.	do.	Do.
241	"Anhydrous ammonia" (liquefied)	do.	do.	Do.	246	"Sulfur dioxide" (liquefied)	do.	do.	Green gas label.
242	"Argon" (non-liquefied)	do.	do.	Do.	247	Compressed gases named in these regulations and differing in packing and marking requirements from those listed above as follows: "Crude nitrogen fertilizer solution" (liquid). "Fertilizer ammoniating solution" containing free ammonia" (liquid).	No exemption.	Tank motor vehicles	Do.
243	"Borane" (non-liquefied)	do.	do.	Do.	248	"Fertilizer ammoniating solution" containing free ammonia" (liquid).	do.	do.	Do.
244	"Chlorine" (liquefied)	do.	do.	Do.	249	POISONS, DANGEROUS CLASS A, LIQUIDS AND GASES "Ammunition, chemical" Packed and marked according to War and Navy regulations.	No exemption; forbidden for express.	In accordance with War and Navy Department regulations.	Poison gas.
245	"Coal gas" (non-liquefied)	do.	do.	Do.	250	"Acid, hydrocyanic (prussic)"	do.	Cylinders, wooden boxes.	Do.
246	"Compressed gas, n. o. s." (liquefied or non-liquefied).	do.	do.	Do.	251	"Acrolein"	do.	do.	Do.
247	"Dichlorodifluoromethane" (liquefied or non-liquefied)	do.	do.	Do.	252	"Bromacetone"	do.	do.	Do.
248	"Dimethyl ether" (liquefied)	do.	do.	Do.	253	"Carbonyl chloride (phosgene)"	do.	Cylinders.	Do.
249	"Ethane" (non-liquefied)	do.	do.	Do.	254	"Chloroform"	No exemption; forbidden for express unless in wooden boxes (I. C. C. specification).	do.	Do.
250	"Ethylene" (non-liquefied)	do.	do.	Do.	255	"Cyanogen"	No exemption forbidden for express.	Wooden boxes, Chloroform or mixtures in cylinders less than 18 in. in length or less than 5 in. in diameter must be in boxes or crates.)	Do.
251		do.	do.	Do.	256	"Gas identification sets"	No exemption	Cylinders.	Do.
		do.	do.	Do.	257	"Mustard gas"	No exemption forbidden for express.	Wooden boxes, cylinders.	Do.
		do.	do.	Do.	258	"Poisons, liquids or gases, herein, Class A" not named herein.	do.	do.	Do.
		do.	do.	Do.	259	"Police grenades containing class A poison."	do.	Wooden boxes	Do.
		do.	do.	Do.	260	"Xyl bromide"	do.	Cylinders	Do.

⁴ Words in parentheses give the state in which the gas is transported.
¹ Red gas label indicates inflammable. Green gas label indicates non-inflammable.

ALSO FORBIDDEN FOR TRANSPORTATION ON BUSES AS DESCRIBED IN THE DEFINITION GIVEN IN THE REGULATIONS

No.	Name of article	Description
332	Ammunition for cannon—with and without projectiles.	Rule 7.20014.
333	Black powder or low explosives, except fireworks.	Rule 7.20012.
334	Blasting caps.	Rule 7.20016.
335	Chemical ammunition.	
336	Detonating fuses or boosters (explosive).	Rule 7.20017.
337	Explosive blasting caps.	Rule 7.20016.
338	Explosive bombs, mines, projectiles and torpedoes.	Rule 7.20018.
339	Gas grenades.	Rule 7.20018.
340	Hand grenades.	Rule 7.20018.
341	High explosives.	Rule 7.20011.
342	Incidinary grenades.	Rule 7.20015.
343	Liquid nitroglycerin.	
344	Police grenades—Class A.	Rule 7.20015.
345	Rifle grenades.	Rule 7.20015.
346	Smoke grenades.	Rule 7.20015.
347	Smokeless powder for cannon.	Rule 7.20021.
348	Smokeless powder for small arms.	Rule 7.20021.

SEMIHAZARDOUS ARTICLES

No.	Name of article	Packing requirements, if any, and precautions to be taken before and during transportation
349	"Alfalfa feed"	Protect from sparks.
350	"Ashes"	Thoroughly cooled.
351	"Battery parts, unwashed, exhausted, plates" etc., containing electrolyte.	Less than truckload lots in wooden boxes, barrels or metal drums (no I. C. C. specification marking). Truckload lots—body to be swept before loading.
352	"Bone, chipped"	Thoroughly cooled.
353	"Calcium carbide"	Protected from moisture.
354	"Camphor, crude"	Protected from sparks.
355	"Coal briquets"	Thoroughly cooled.
356	"Coke"	Do.
357	"Cotton"	Protected from sparks.
358	"Cotton batting"	Do.
359	"Cotton wadding"	Do.
360	"Cotton waste"	Do.
361	"Excelsior"	Do.
362	"Feed, wet, mixed"	Do.
363	"Fiber"	Do.
364	"Hay"	Do.
365	"Hemp"	Do.
366	"Jute"	Do.
367	"Lead dross, untreated"	To be packed in wooden barrels (no I. C. C. specification marking) together with material which absorbs sulfuric acid.
368		Thoroughly cooled.
369	"Lime"	Protected from sparks.
370	"Lime, unslacked"	Do.
371	"Oakum"	Do.
372	"Oil well cables"	Do.
373	"Rags"	Do.
374	"Sawdust"	Do.
375	"Straw"	Do.
376	"Sulfuric acid, scrap" or "waste"	To be packed in wooden barrels (No I. C. C. specification marking) together with material which absorbs sulfuric acid.
377	"Sulphate of lead"	To be packed in wooden barrels (No I. C. C. specification marking) together with material which absorbs sulfuric acid.
378	"Sulfur"	Protected from sparks.
379	"Tow"	Do.

Explosives Forbidden for Transportation Under Described Conditions

FORBIDDEN FOR ALL TRANSPORTATION

No.	Class and name	Exemptions	Containers in which authorized to be transported	Required label and marking on outside package	Description
318	"Tear gas candles" or "Tear gas cartridges."	No exemption.	Wooden boxes.	Tear gas label.	
319	Poisons, Class C, "Tear gas materials", n. o. s. not named herein but having similar characteristics and hazards.	do.	Cylinders except acetylene cylinders.	Do.	
320	"Poisonous, liquids and solids, n. o. s. class C."	do.	Cylinders.	Do.	
			Wooden boxes.		
321	Diazodinitrophenol.				Must not be shipped when dry except in manufactured articles not otherwise forbidden.
322	Dynamite.				Except gelatin dynamite, must not contain over 60% liquid explosive ingredient or any dynamite having unsatisfactory absorbent that permits leakage.
323	Explosives (including fireworks) condemned.				Explosives condemned by Bureau of Explosives, except samples.
324	Explosives and explosive compositions.				That ignite spontaneously or decompose under laboratory test.
325	Explosives (including fireworks) containing an ammonium salt and a chlorate.				
326	Firecrackers.				Over 5 inches in length or 3/4 inch diameter, or 45 grains of powder each.
327	Fireworks.				(a) Combining an explosive and a detonating cap. (b) Combining an ammonium salt and a chlorate. (c) Containing yellow or white phosphorus. (d) Explosible en masse but may be shipped as "High explosive" by freight. (e) With igniting device unless protected against contact or friction. (f) That ignite spontaneously or decompose under laboratory test. (Also applicable to fireworks compositions).
328	Fulminate of mercury and also the following: Guanyl nitrosamino guanidine hydrazine. Guanyl nitrosamino guanyl tetrazene (tetrazene). Lead azide. Lead styphnate. Nitroguanidine. Nitroguanite. Penterythrite-tetranitrate.				Dry in bulk, except in manufactured articles not otherwise forbidden.
329	New explosives, except samples.				Must not be shipped unless approved by Bureau of Explosives.
330	Toy caps.				Containing over average of 25/100 grains of explosive composition per cap.
331	Toy torpedoes.				(a) Containing red phosphorus and potassium chlorate over average of 1/2 grain per cap. (b) Over 1 1/2 inches in diameter or containing over average of 7 grains of potassium chlorate, black antimony, and sulphur.

DANGEROUS ARTICLES OTHER THAN EXPLOSIVES—FORBIDDEN EXCEPT UNDER PRESCRIBED CONDITIONS

No.	Name of article	Packing requirements, if any, and precautions to be taken before and during transportation
350	"Acid carboys, empty"	Thoroughly drained.
381	Ammunition material for cannon relating to ammunition for cannon, nonexplosive and other articles, as follows:	Rotating bands of cannon ammunition protected.
382	"Cartridge cases,"	
383	"Dummy or drill cartridges", etc.	
384	"Projectiles, sand-loaded", "empty", or "solid."	
385	"Bombs, sand-loaded" or "empty."	
386	"Mines, empty."	
387	"Torpedoes, empty."	
388	"Automobiles", "motor cycles", "tractors", or other "self-propelled vehicles."	Fuel tanks securely closed but draining of gasoline tanks not required.
389	"Burnt cotton" or "Burnt fiber"	To be picked and repacked in bales.
390	"Coals, ground bituminous", "seacoal", "coal facing", etc.	90% must pass 100 mesh sieve and stored at least 6 days after grinding.
391	"Cylinders"	Must not contain gases which are capable of combining chemically.
392	"Fire extinguishers, hand", containing nonliquefied gas.	
394	"Fish scrap"	Must have between 8 and 12% moisture except acidulated fish scrap—40 to 55% moisture. Temperature to be 100° F or below when packed.
395	"Fumigants"	Must contain 4 ounces or less of oxidizing or other material.
396	"Garbage tankage"	Must have 8 or more percent moisture. Temperature 100° F or below when loaded.
397	"Iron sponge"	Must be thoroughly oxidized during manufacture.
398	"Machines or apparatus containing gas or liquid"	Must not contain over 15 pounds of gas or liquid.
399	"Matches, strike anywhere with other articles"	Forbidden to be packed in same container with other articles.
400	"Matches"	Must not ignite spontaneously if subjected to a temperature of 300° F or more for more than 8 consecutive hours.
401	"Motion picture film, toy, pieces exposed"	To be packed in metal box (No I. C. C. specification marking) when with other articles.
402	"Rags" or "cotton waste", "oily with animal" or "vegetable oil."	Must have 5% or less oil. Must not be wet.
403	"Refrigerating machines"	Inflammable liquid limited to 15 lb. for freight only.
404	"Rough ammoniate tankage"	Compressed gas limited to 25 lb.
405	"Tankage fertilizers"	Must have 7% or more moisture. Temperature 100° F, or below when loaded.
406	"Spent iron mass"	Must have 8% or more moisture. Temperature 100° F, or below when loaded.
407	"Spent oxide"	Must be in open, steel bodied motor vehicles.
408	"Wet burlap bags"	Do.
409	"Wet charcoal"	Must not be wet when shipped.
410	"Wet screenings" (charcoal)	Do.
411	"Wet fiber" or "Damp fiber"	Do.
412	"Wet hair"	Do.
413	"Wet hemp"	Must be shipped in open steel bodied motor vehicles.
414	"Wet jute"	Must not be wet when shipped.
415	"Wet paper stock"	Do.
416	"Wet rags", "wet waste paper", "wet textile waste", "wet waste wool."	Do.

NONHAZARDOUS ARTICLES

417	"Charcoal, animal"	No regulations herein.
418	"Charcoal briquets" made from wood charcoal with starch and water or tar as a binder.	Screened and cooled.
419	"Charcoal, bone"	No regulations herein.
420	"Charcoal", "wood", "lump", "kiln" or "pit"	Must have long air exposure before loading.
421	"Matches, strike-on-box" or "book"	Must not be packed with other articles in order to be exempt.
422	"Motion picture film, old and worn out, slow burning."	No regulations herein.
423	"Motion picture film, scrap, slow burning"	Do.
425	"Safety fuse"	Do.

APPENDIX 7.2—EXPLOSIVES

Specification 7.2-S-1 for Containers for Liquid Nitroglycerin

Every motor vehicle used for the transportation of liquid nitroglycerin shall have a body constructed as set forth below, which body shall have component parts as specified hereinafter:

7.2-S-1.1 Motor vehicle body.

7.2-S-1.11 Body proper. The motor vehicle body proper shall have a hinged cover. Both the body and the cover shall be well and strongly built of wood or other non-sparking material of equal strength, thoroughly waterproofed, having no end or side openings, and lined

with copper or other non-sparking sheet metal having all seams made tight against leakage of nitroglycerin by welding, brazing, or soldering. No metal of such character as to be capable of producing a spark when struck may be exposed on the inside or the top of the body, nor on the nether side or any edge of the cover, the top of which shall be covered with metal. The body shall be of such dimensions that it will contain only a single tier of individual containers and of such approximate height that the felt pads will securely constrain all inside containers from vertical motion with respect to the body, and shall be securely and firmly attached to the chassis of the motor ve-

hicle. The total carrying capacity of the body shall not exceed nine hundred (900) quarts liquid measure of liquid nitroglycerin.

7.2-S-1.12 Cellular construction. In the motor vehicle body specified in 7.2-S-1.11 above shall be inserted suitable wooden or other non-metallic, non-sparking cellular construction, the dimensions of each cell of which shall be such that the rubber "boot" or secondary container for the primary container of the nitroglycerin, both of which are specified hereinafter, shall snugly fit. This cellular construction shall extend from near the top to near the bottom of the full height of each "boot" to be fitted therein, and shall rest upon and be covered by at least one-half (1/2) inch of felt padding or other material affording equivalent shock absorbing protection. The cellular construction shall be of such strength as to provide suitable restraint under all conditions of loading to prevent relative motion of inside containers to be inserted or carried therein.

7.2-S-1.2 Inside containers and boots.

7.2-S-1.21 Inside containers. Individual containers shall be made of copper or other non-sparking metal of equivalent strength, with all seams closed by welding, brazing, or soldering, and shall be tight against leakage of liquid nitroglycerin. No individual container shall exceed ten (10) quarts (liquid measure) capacity of liquid nitroglycerin.

7.2-S-1.22 Boots—Rubber containers for individual containers. Each individual container of liquid nitroglycerin shall be contained in a rubber boot or outer container into which it shall snugly fit, and which, in turn, shall snugly fit into any cell of the cellular construction specified in subparagraph 7.2-S-1.12 of this Specification. This boot shall be watertight throughout and at least of such volume as to contain all of the liquid content of liquid nitroglycerin of any inside container inserted in it. It shall be provided with "Vee" shaped grooves at suitable spacings throughout its inside surface, extending from top to bottom in such manner as to prevent the entrapment of air therein upon insertion of the inside container of liquid nitroglycerin. The inside height of the rubber boot shall approximate the height of the inside container (including stopper) as shipped.

APPENDIX 7.2—RECOMMENDED SPECIFICATION

(Not compulsory specification)

Container for Blasting Caps, Electric Blasting Caps, and Percussion Caps

1. Scope. This specification pertains to a container to be used for the transportation of blasting caps, electric blasting caps, and percussion caps in connection with the transportation of liquid nitroglycerin, where any or all or such types of caps may be used for the det-

onation of liquid nitroglycerin in blasting operations. This specification is not intended to take the place of any shipping or packing requirements of this Commission where the caps in question are themselves articles of commerce.

2. *Container.* Every container for blasting caps, electric blasting caps, and percussion caps coming within the scope of this Specification shall be constructed entirely of hard rubber, phenolresinous or other resinous material, or other non-metallic, non-sparking material, except that metal parts may be used in such locations as not in any event to come in contact with any of the caps. Space shall be provided so that each blasting cap of whatever nature may be inserted in an individual cell in the body of the container, into which each such cap shall snugly fit. There shall be provided no more than twenty (20) such cellular spaces. Space may be provided into which a plurality of percussion caps may be carried, provided such space may be closed with a screw cap, and further provided that each or any such space is entirely separate from any space provided for any blasting cap. Each cellular space into which a blasting cap is to be inserted and carried shall be capable of being covered by a rotary cover so arranged as to expose not more than one cell at any time, and capable of rotation to such a place that all cells will be covered at the same time, at which place means shall be provided to lock the cover in place. Means shall be provided to lock the cover for the cells provided for the carrying of electric blasting caps in place, the requirement that not more than one cell be exposed at one time need not apply in the case of electric blasting caps, although spaces for such caps and blasting caps shall be separate. Sufficient annular space shall be provided inside the cover for such electric blasting caps that, when the cover is closed, there will be sufficient space to accommodate the wires customarily attached to such caps. If the material is of such a nature as to require treatment to prevent the absorption of moisture, such treatment shall be applied as shall be necessary in order to provide against the penetration of water by permeation. A suitable carrying handle shall be provided, except for which handle no part of the container may project beyond the exterior of the body.

Exhibited in Plates I and II of Appendix 7.2 are line drawings of a container for blasting caps, electric blasting caps, and percussion caps, illustrative of the requirements above set forth. These plates shall not be construed as a part of this specification.¹

¹ Filed as a part of the original document.
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APPENDIX 7.3—INFLAMMABLE LIQUIDS

Specification 7.3-S-1—Type A Cargo Tanks and Tank Motor Vehicles for the Transportation of Inflammable Liquids

7.3-S-1.0 *Scope.* This specification is primarily designed to apply to tank motor vehicles and Type A cargo tanks (including tank containers) to be used for the transportation of inflammable liquids as defined in Rule 7.3001 of Section 7.3 of these regulations, and, though not mandatory for tanks or for motor vehicles for the transportation of liquids having flash points above eighty degrees Fahrenheit (80° F.), it is recommended that such liquids be transported in tanks and on tank motor vehicles having characteristics equal or superior to the requirements herein set forth.

This specification as a whole is divided into several parts, thus:

Specification 7.3-S-1.1 for Tank motor vehicles.

Specification 7.3-S-1.2 for Type A cargo tanks constructed of mild (open hearth or blue annealed) steel.

Specification 7.3-S-1.3 for Type A cargo tanks constructed of welded aluminum alloys (Grade 3S).

Specification 7.3-S-1.4 for Type A cargo tanks constructed of welded aluminum alloy (Grade 52S).

Specification 7.3-S-1.5 for Type A cargo tanks constructed of welded ferrous alloy (high tensile steel).

Specification 7.3-S-1.6 for Type A cargo tanks constructed of welded austenitic stainless steel.

Specification 7.3-S-1.1—Tank Motor Vehicles

7.3-S-1.11 Wheels.

7.3-S-1.111 Four wheels required. No tank truck or tank full trailer shall be equipped with less than four wheels, except that this requirement shall not apply to tank semitrailers.

7.3-S-1.112 Pneumatic tires required. All tank motor vehicles shall be equipped with pneumatic rubber tires on all wheels.

7.3-S-1.12 Electric Lighting Required. Tank trucks, tank trailers and tank semitrailers shall be equipped with electric lights and no others. Lighting circuits shall have suitable over-current protection (fuses or automatic circuit breakers). The wiring shall have adequate current carrying capacity and mechanical strength, and shall be suitably secured, insulated and protected, against physical damage. (See also Rule 3.413 of these regulations).

7.3-S-1.13 Tank vehicle fuel systems.

7.3-S-1.131 Gasoline or Diesel fuel tanks. The fuel tanks for the propulsion of any tank motor vehicle using gasoline or Diesel fuel shall be so designed, constructed and installed as to

present no hazard not inherent in their purpose or use, and shall be so arranged as to vent during filling operations and as to permit complete drainage without removal from their mountings. They shall be so arranged that no fuel will be spilled on any part of the exhaust system in the event of overflow or spillage.

7.3-S-1.132 Fuel feed system. The fuel feed system of any fuel system using inflammable liquids as defined herein shall be so constructed and located as to minimize the fire hazard, with no readily combustible materials used therein, and shall be well separated from the engine exhaust system. A pressure release device shall be provided where necessary. The fuel feed lines shall be made of material not affected by the fuel to be used or by other materials likely to be encountered, having adequate strength for their purpose, well secured to avoid chafing or undue vibration, and having a readily accessible and reliable shut-off valve or stop cock.

7.3-S-1.133 Carburetor. The carburetor, if used, shall be so constructed and installed as to minimize the hazards due to backfiring, and other hazards inherent in its use, and shall be provided with direct drainage for overflow gasoline.

7.3-S-1.134 General. All parts of the vehicle fuel system shall be constructed and installed in a workmanlike manner.

7.3-S-1.14 Exhaust system. All parts of the motor vehicle exhaust system shall be constructed and installed in a workmanlike manner and shall have ample clearance from the fuel system and other combustible materials, being in no case exposed to accumulations of grease, oils, or gasoline. A muffler cut-out shall not be used.

7.3-S-1.15 Brakes. Each tank truck, tank full trailer, and tank semitrailer shall be equipped with reliable brakes on all wheels, and adequate provision shall be made for their efficient operation from the driver's seat of the vehicle towing the trailer.

Specification 7.3-S-1.2—Type A Cargo Tanks Constructed of Mild (Open Hearth or Blue Annealed) Steel

7.3-S-1.201 Workmanship, general. Every Type A cargo tank shall be constructed in accordance with the best known and available practices, in addition to the other requirements of this Specification.

7.3-S-1.202 Material. All steel sheets for such cargo tanks shall be of open hearth steel or blue annealed steel meeting the following requirements:

Yield Point.....	25,000 lb. per sq. in.
Ultimate Strength.....	45,000 lb. per sq. in.
Elongation, 2" sample....	20%

7.3-S-1.203 Thickness of sheets. The minimum thicknesses of tank sheets shall be as follows:

Aggregate capacity, U. S. gallons	Thickness of metal, U. S. gage numbers					
	Shell—thickness		Head			
			Flat without reinforcement—thickness		Dished, corrugated or reinforced—thickness	
	Gage nos.	Inches appr.	Gage nos.	Inches appr.	Gage nos.	Inches appr.
600 or less	14	0.078	12	0.109	14	0.078
Over 600 if divided into compartments of 600 or less	12	.109	10	.141	12	.109
Over 1,200 if not divided into compartments, or if divided into compartments of 1,200 or more	10	.141	8	.172	8	.172

7.3-S-1.204 A tolerance of ten (10) percent shall be allowed for capacities of compartments and tanks.

7.3-S-1.205 Joints.

7.3-S-1.2051 *Method of joining.* Sheets may be joined by fusion welding, riveting and fusion welding, brazing, or riveting and brazing, at the option of the motor carrier.

7.3-S-1.2052 *Strength of joints.* The tensile strength of each joint in a tank shall be not less than 85% of that of the adjacent metal in the tank. Compliance with this requirement shall be determined by preparing, from materials representative of those to be used in tanks subject to this specification and by the same technique of fabrication, two (2) test specimens conforming to Fig. 7.3-S-1.2052¹ and testing them to failure in tension. One pair of test specimens may represent all the tanks to be made of the same combination of materials, by the same technique of fabrication, and in the same shop, within six (6) months after the tests on such samples have been completed.

7.3-S-1.206 Pressure tests.

7.3-S-1.2061 *Test for leakage.* Every cargo tank shall be tested by a minimum air or hydrostatic pressure of three (3) lbs. per square inch gage applied to each compartment, or to the whole tank if it be not divided into compartments. Such pressure shall be maintained for a period of at least five (5) minutes, during which, if the test is by air pressure, the entire exterior surface of all the joints shall be coated with a solution of soap and water, heavy oil, or other material suitable for the purpose, foaming or bubbling of which will indicate the presence of leaks. Hydrostatic pressure, if used, shall be gaged at the top of the tank; and the tank shall be inspected at the joints for the issuance of liquid to indicate leaks. Any leakage discovered by either of the methods above described, or by any other method, shall be deemed as evidence of failure to meet the requirements of this Specification.

7.3-S-1.2062 *Test for distortion or failure.* Every cargo tank to which this Specification applies shall successfully withstand the tests set forth in 7.3-S-1.1061 without undue distortion, evidence of impending failure, or failure.

Failure to meet this requirement shall be deemed as sufficient cause for rejection under this Specification.

7.3-S-1.207 *Marking of cargo tanks by metal plates.* Every Type A cargo tank designed and constructed in accordance with this Specification shall be marked on a metal plate with the designation "I C C 7.3-S-1.2" as set forth in Rule 7.31141, together with the other markings therein specified. In addition, the test markings shall be painted on the tank in the manner prescribed in Rule 7.31142.

7.3-S-1.208 *Tank outlets.* Outlet fixtures of tanks shall be substantially made and attached to the tank in such a manner as to prevent breakage at the outlet point.

7.3-S-1.209 Bulkheads or baffles.

7.3-S-1.2091 *When bulkheads not required.* No bulkhead shall be required in any cargo tank regardless of capacity which is designed for service in which there will never be less than eighty percent (80%) of the capacity volume of the tank while in transportation over the highway and which, in service, is to discharge its entire contents at one unloading point.

7.3-S-1.2092 *Number, dimensions, and capacities of bulkheads and baffles.* Except as provided in Rule 7.3-S-1.2 next above of this specification, every cargo tank shall be divided into compartments and/or provided with baffles as follows:

(a) Every cargo tank larger than fifteen hundred (1,500) gallons shall be divided into compartments, the number of which shall be the result of dividing the capacity of the tank in gallons by twelve hundred (1,200), to the nearest whole number.

(b) Every cargo tank, and every compartment of a cargo tank, over ninety (90'') in length, shall be provided with baffles, the number of which shall be such that the linear distance between any two adjacent baffles, or between any tank head or bulkhead and the baffle nearest it, shall in no case exceed sixty inches (60'').

(c) Each bulkhead required herein shall have adequate strength to sustain without undue stress or any permanent set a horizontal force equal to the weight of so much of the contents of the tank as may come between it and any adjacent bulkhead or tank head, applied as a uni-

formly distributed load on the surface of the bulkhead or tank head.

(d) Each baffle required herein shall have at least an area as great as eighty percent (80%) of the cross-sectional area of the tank.

(e) If spaces are provided between compartments, such spaces shall be arranged for venting and for complete drainage at all times.

7.3-S-1.210 *Tank vents.* Each tank or tank compartment shall be provided with a vacuum and pressure operated vent with a minimum effective opening of forty-four hundredths of a square inch (0.44 sq. in.), and shall also be provided with an emergency venting facility so constructed as to provide a minimum free-venting opening having a net area in square inches equal to 1.25 plus 0.0025 times the capacity of the tank or compartment in gallons. If the emergency venting facility operates in response to elevated temperatures, the critical temperature for such operation shall not exceed two hundred degrees Fahrenheit (200° F.).

7.3-S-1.211 *Valve and faucet connections.* All draw-off valves or faucets of tanks and compartments shall have discharge ends threaded, or be otherwise so designed as to insure in every instance a tight connection with the hose extending to the storage fill pipe.

7.3-S-1.212 *Emergency discharge control.* Each tank or tank compartment of a bottom-discharge tank shall be equipped with a reliable and effective shut-off valve located inside the shell of the tank or tank compartment in the tank or compartment outlet; and the operating mechanism for such valve or valves shall be provided with a secondary closing mechanism remote from tank filling openings and discharge faucets, for operation in the event of fire or other accident. Such control mechanism shall be provided with a fusible section which will cause the valve to close automatically in case of fire, and the critical temperature for the fusing of such section shall not exceed two hundred degrees Fahrenheit (200° F.).

7.3-S-1.213 *Shear section.* There shall be provided between each shut-off valve seat and discharge faucet a shear section which will break under strain, unless the discharge piping is so arranged as to afford equivalent protection, and leave the shut-off valve seat intact in case of accident to the discharge faucet or piping.

7.3-S-1.214 *Protection of valves and faucets.* Draw-off valves and faucets projecting beyond the frame, or if the vehicle be frameless, beyond the shell, at the rear, shall be adequately protected by steel bumpers or other equally effective devices, against collision.

7.3-S-1.215 *Overturn protection.* All closures for filling openings shall be protected from damage in the event of overturning of the motor vehicle, by being enclosed within the body of the tank or a dome attached thereto, or by the use

¹ Filed as a part of the original document.

of suitable metal guards securely attached to the tank or the frame of the motor vehicle.

7.3-S-1.216 *Can boxes.* The can and bucket boxes on tank motor vehicles shall be so constructed or lined as to prevent sparking.

Specification 7.3-S-1.3—Type A Cargo Tanks Constructed of Welded Aluminum Alloy (Grade 3S)

7.3-S-1.301 *Workmanship, general.* (See 7.3-S-1.201.)

7.3-S-1.302 *Material.* All sheets for such cargo tanks shall be of aluminum alloy, known as 3 S alloy, meeting the following minimum requirements:

Yield strength 18,000 lb. per sq. in.
Ultimate strength 21,000 lb. per sq. in.
Elongation, 2" sample... 8%

NOTES: Yield strength is the stress which produces a permanent set of 0.2 percent of the initial gage length. (ASTM E8-36.)

7.3-S-1.303 *Thickness of sheets.* The minimum thicknesses of tank sheets shall be as follows:

7.3-S-1.309 *Bulkheads or baffles.*¹
7.3-S-1.310 *Tank vents.*¹
7.3-S-1.311 *Valve and faucet connections.*¹
7.3-S-1.312 *Emergency discharge control.*¹
7.3-S-1.313 *Shear section.*¹
7.3-S-1.314 *Protection of valves and faucets.*¹
7.3-S-1.315 *Overturn protection.*¹
7.3-S-1.316 *Can boxes.*¹

Specification 7.3-S-1.4—Type A Cargo Tank Constructed of Welded Aluminum Alloy (Grade 52 S)

7.3-S-1.401 *Workmanship, general.* (See 7.3-S-1.201.)

7.3-S-1.402 *Material.* All sheets for such cargo tanks shall be of aluminum alloy, known as 52 S alloy, meeting the following minimum requirements:

Yield strength 26,000 lb. per sq. in.
Ultimate strength 34,000 lb. per sq. in.
Elongation, 2" sample... 12%

NOTE.—Yield strength is the stress which produces a permanent set of 0.2 percent of the initial gage length. (ASTM E8-36.)

7.3-S-1.403 *Thickness of sheets.* The minimum thickness of tank sheets shall be as follows:

Aggregate capacity, U. S. gallons	Thickness of metal, U. S. gage numbers					
	Shell—thickness		Head			
			Flat without reinforcement—thickness		Dished, corrugated or reinforced—thickness	
	Inches appr.	Gage Nos.	Inches appr.	Gage Nos.	Inches appr.	Gage Nos.
600 or less.....	0.109	12	0.156	9	0.109	12
Over 600 to 1,200.....	.156	9	.203	6	.156	9
Over 1,200: (a) Divided into compartments of 600 gallons or less.....	.156	9	.203	6	.203	6
Over 1,200: (b) If not divided into compartments, or if divided into compartments of 1,200 or more.....	.203	6	.234	4	.234	4

7.3-S-1.304 *Tolerance.* A tolerance of 10 percent shall be allowed for capacities of compartments and tanks.

7.3-S-1.305 *Joints.* Sheets shall be joined by fusion welding. The tensile strength of each joint in a tank shall be not less than 15,000 lb. per sq. in. Compliance with this requirement shall be determined by preparing, from materials representative of those to be used in tanks subject to this specification and by the same technique of fabrication, two (2) test specimens conforming to Fig. 7.3-S-1.2052 of Specification 7.3-S-1.2 and testing them to failure in tension. One pair of test specimens may represent all the tanks to be made of the same combination of materials, by the same technique of fabrication, and in the same shop, within (6) months after the tests on such samples have been completed.

7.3-S-1.306 *Pressure test.* The requirements of this rule are identical with those set forth in 7.3-S-1.206 of Specification 7.3-S-1.2.

7.3-S-1.307 *Marking of cargo tanks by metal plates.* The requirements of Specification 7.3-S-1.3 regarding marking are identical with those set forth in 7.3-S-1.207 of Specification 7.3-S-2, except that tanks shall be marked "ICC 7.3-S-1.3", instead of "ICC 7.3-S-1.2".

7.3-S-1.308 *Tank outlets.*¹

¹ The requirements concerning the listed items are identical with those set forth for such items in Specification 7.3-S-1.2, items 7.3-S-1.208 to 7.3-S-1.216 inclusive.

Aggregate capacity, U. S. gallons	Thickness of metal, U. S. gage numbers					
	Shell—thickness		Head			
			Flat without reinforcement—thickness		Dished, corrugated or reinforced—thickness	
	Gage Nos.	Inches appr.	Gage Nos.	Inches appr.	Gage Nos.	Inches appr.
600 or less.....	14	0.078	12	0.109	14	0.078
Over 600 to 1,200.....	12	.109	10	.141	12	.109
Over 1,200: (a) Divided into compartments of 600 gallons or less.....	12	.109	10	.141	10	.141
Over 1,200: (b) If not divided into compartments, or if divided into compartments of 1,200 or more.....	10	.141	8	.172	8	.172

7.3-S-1.404 *Tolerance.* A tolerance of 10 percent shall be allowed for capacities of compartments and tanks.

7.3-S-1.405 *Joints.* (See 7.3-S-1.305).

7.3-S-1.406 *Pressure test.* The requirements of this paragraph are identical with those set forth in 7.3-S-206 of Specification 7.3-S-1.2.

7.3-S-1.407 *Marking of cargo tanks by metal plates.* The requirements of Specification 7.3-S-1.4 regarding marking are identical with those set forth in 7.3-S-1.207 of Specification 7.3-S-1.2, except that tanks shall be marked "I C C 7.3-S-1.4", instead of "I C C 7.3-S-1.2".

7.3-S-1.408 *Tank outlets.*²

² The requirements concerning the listed items are identical with those set forth for such items in Specification 7.3-S-1.2, items 7.3-S-1.208 to 7.3-S-1.216, inclusive.

7.3-S-1.409 *Bulkheads or baffles.*²
7.3-S-1.410 *Tank vents.*²
7.3-S-1.411 *Valve and faucet connections.*²
7.3-S-1.412 *Emergency discharge control.*²
7.3-S-1.413 *Shear section.*²
7.3-S-1.414 *Protection of valves and faucets.*²
7.3-S-1.415 *Overturn protection.*²
7.3-S-1.416 *Can boxes.*²

Specification 7.3-S-1.5—Type A cargo tanks constructed of welded ferrous alloy (high tensile steel)

7.3-S-1.501 *Workmanship. General.* (See 7.3-S-1.201.)

7.3-S-1.502 *Material.* All sheets for such cargo tanks shall be of ferrous alloy, commonly known as high tensile steel,

meeting the following minimum requirements:

Yield point..... 50,000 lb. per sq. in.
Ultimate strength..... 65,000 lb. per sq. in.
Elongation, 2" sample..... 20 percent.

7.3-S-1.503 *Thickness of sheets.* The minimum thicknesses of tank sheets shall

be limited by the volume capacity of the tank, expressed in terms of gallons per inch of length; by the distance between successive bulkheads in the case of bulkhead sheets; and by the distance between bulkheads, baffles, or other shell stiffeners as well as by the radius of shell curvature in the case of shell sheets; as follows:

TABLE 7.3-S-1.5031.—*Thickness of Head and Bulkhead Sheets*

Distances between bulkhead attachments to shell in inches	Volume capacity of tank in gallons per inch of length									
	6 or less		Over 6 to 10		Over 10 to 14		Over 14 to 18		Over 18	
	Bulkheads (dished, corrugated or reinforced) sheet thicknesses in U. S. gage numbers and number of inches depending upon distances between bulkhead attachments to shell									
	Gage Nos.	In. appr.	Gage Nos.	In. appr.	Gage Nos.	In. appr.	Gage Nos.	In. appr.	Gage Nos.	In. appr.
30" or less	17	0.056	16	0.062	15	0.070	14	0.078	13	0.094
Over 30"	16	.062	15	.070	14	.078	13	.094	12	.109
	Bulkheads (flat without reinforcement) sheet thicknesses in U. S. gage numbers and number of inches depending upon distances between bulkhead attachments to shell									
	Gage Nos.	In. appr.	Gage Nos.	In. appr.	Gage Nos.	In. appr.	Gage Nos.	In. appr.	Gage Nos.	In. appr.
30" or less	15	0.070	14	0.078	13	0.094	12	0.109	11	0.125
Over 30"	14	.078	13	.094	12	.109	11	.125	10	.141

Thickness of Shell Sheets

Distance between bulkheads, baffles, or other shell stiffeners	Volume capacity of tank in gallons per inch of length									
	6 or less		Over 6 to 10		Over 10 to 14		Over 14 to 18		Over 18	
	Shell-sheet thicknesses in U. S. gage and number of inches for that portion of the shell rolled to a radius of less than 70 inches, depending on spacing of shell stiffeners									
	Gage Nos.	In. app.	Gage Nos.	In. app.	Gage Nos.	In. app.	Gage Nos.	In. app.	Gage Nos.	In. app.
20" or less	19	0.044	18	0.050	17	0.056	16	0.062	15	0.070
Over 20" to 36"	18	.050	17	.056	16	.062	15	.070	14	.078
Over 36" to 56"	17	.056	16	.062	15	.070	14	.078	13	.094
Over 56"	16	.062	15	.070	14	.078	13	.094	12	.109
	Shell-sheet thicknesses in U. S. gage and number of inches for that portion of the shell rolled to a radius of 70 inches or more but less than 90 inches, depending on spacing of shell stiffeners									
20" or less	18	0.050	17	0.056	16	0.062	15	0.070	14	0.078
Over 20" to 36"	17	.056	16	.062	15	.070	14	.078	13	.094
Over 36" to 56"	16	.062	15	.070	14	.078	13	.094	12	.109
Over 56"	15	.070	14	.078	13	.094	12	.109	11	.125
	Shell-sheet thicknesses in U. S. gage and number of inches for that portion of the shell rolled to a radius of 90 inches or more but less than 125 inches, depending on spacing of shell stiffeners									
20" or less	17	0.056	16	0.062	15	0.070	14	0.078	13	0.094
Over 20" to 36"	16	.062	15	.070	14	.078	13	.094	12	.109
Over 36" to 56"	15	.070	14	.078	13	.094	12	.109	11	.125
Over 56"	14	.078	13	.094	12	.109	11	.125	10	.141
	Shell-sheet thicknesses in U. S. gage and number of inches for that portion of the shell rolled to a radius of 125 inches or more depending upon spacing of shell stiffeners									
20" or less	16	0.062	15	0.070	14	0.078	13	0.094	12	0.109
Over 20" to 36"	15	.070	14	.078	13	.094	12	.109	11	.125
Over 36" to 56"	14	.078	13	.094	12	.109	11	.125	10	.141
Over 56"	13	.094	12	.109	11	.125	10	.141	9	.156

7.3-S-1.505 *Joints.*^a

7.3-S-1.506 *Pressure test.*^a

7.3-S-1.507 *Marking of cargo tanks by metal plates.* The requirements of Specification 7.3-S-1.5 regarding marking are identical with those set forth in 7.3-S-1.207 of Specification 7.3-S-1.2, except that tanks shall be marked "I C C 7.3-S-1.5", instead of "I C C 7.3-S-1.2".

7.3-S-1.508 *Tank outlets.*^a

7.3-S-1.509 *Bulkheads or baffles.*^a

7.3-S-1.510 *Tank vents.*^a

7.3-S-1.511 *Valve and faucet connections.*^a

7.3-S-1.512 *Emergency discharge control.*^a

7.3-S-1.513 *Shear section.*^a

7.3-S-1.514 *Protection of valves and faucets.*^a

7.3-S-1.515 *Overturn protection.*^a

7.3-S-1.516 *Can boxes.*^a

7.3-S-1.517 *Tank supports.* The distance from a tank support to the nearest bulkhead, baffle, or other shell stiffener, shall not exceed forty (40) times the thickness of the tank shell at the point of support.

Specification 7.3-S-1.6—*Type B Cargo Tanks for the Transportation of Inflammable Liquids*

7.3-S-1.61 *General.*

7.3-S-1.611 *Individual containers.* Each individual container comprising an aggregation of containers in a Type B cargo tank to be used for the transportation of inflammable liquids shall comply with the requirements for such containers for the transportation of inflammable liquids as contained in the Regulations for Shippers of this Commission.

7.3-S-1.612 *Securing means.* Securing means shall be provided for each of the containers comprising a Type B cargo tank for the transportation of inflammable liquids, and such securing means shall be structurally adequate to support and hold such containers. Means shall also be provided for the securing of such containers, by the use of toggles, latches, or other suitable devices, against motion relative to the vehicle during the course of transit of the cargo tank.

APPENDIX 7.5—CORROSIVE LIQUIDS

Specification 7.5-S-1—*Type A Cargo Tanks and Tank Motor Vehicles for the Transportation of Corrosive Liquids*

7.5-S-1.0 *Scope.* This specification is primarily designed to apply to cargo

^a The requirements of these paragraphs are identical with those set forth in 7.3-S-1.205 and 7.3-S-1.206 of Specification 7.3-S-1.2.

^a The requirements concerning the listed items are identical with those set forth for such items in Specification 7.3-S-1.2, items 7.3-S-1.208 to 7.3-S-1.216 inclusive.

tanks (including tank containers) and tank motor vehicles to be used for the transportation of corrosive liquids as defined in Rule 7.5001 of Section 7.5 of these regulations.

Specification 7.5-S-1.1—Tank Motor Vehicles

The requirements regarding tank motor vehicles for the transportation of corrosive liquids shall be identical with the requirements set forth in Specification 7.3-S-1.1.

Specification 7.5-S-1.2—Type A Cargo Tanks for the Transportation of Corrosive Liquids

7.5-S-1.201 General.

7.5-S-1.2011 Must comply with A.S.M.E. Code. Tanks built under this specification shall be designed and constructed in accordance with and fulfill all requirements of Section VIII of the Code for Unfired Pressure Vessels of the American Society of Mechanical Engineers, 1937 edition, which is hereinafter referred to as "the Code".

7.5-S-1.2012 When divided into compartments. When the interior of the tank is divided into compartments, each compartment shall be designed, constructed, tested and retested as a separate tank.

7.5-S-1.202 Material. (See Paragraphs U-12 to U-16 inclusive of "the Code" for grades of material.)

7.5-S-1.2021 Lining. Except as provided in 7.5-S-1.2022. The material used for lining each cargo tank subject to this Specification shall be homogeneous, non-porous, impermeable when applied, not less elastic than the metal of the tank proper, and substantially immune to attack by the commodities to be transported therein. It shall be of substantially uniform thickness, not less than $\frac{1}{32}$ inch thick if metallic, and not less than $\frac{1}{16}$ inch thick if nonmetallic, and shall be directly bonded or attached by other equally satisfactory means. Joints and seams in the lining shall be made by fusing the material together, or by other equally satisfactory means. The interior of the tank shall be free from scale, oxidation, moisture and all foreign matter during the lining operation.

7.5-S-1.2022 Conditions under which tanks need not be lined. Tanks need not be lined as provided in 7.5-S-1.2021 if:

(a) The material of the tank is substantially immune to attack by the materials to be transported therein,

(b) the material of the tank is thick enough to withstand 10 years' normal service without being reduced at any point to less thickness than that specified in 7.5-S-1.203 corresponding to its capacity, or

(c) the chemical reaction between the material of the tank and the commodity to be transported therein is such as to allow the tank to be properly passified or neutralized as set forth elsewhere in this Appendix,

(d) for the transportation of hydrofluoric acid of eighty percent (80%) or higher concentration, they be passified in the following or an equally effective method: by filling the tank to not less than ninety percent (90%) of its capacity with hydrofluoric acid of fifty-eight percent (58%) strength and allowing it to stand at least forty-eight (48) hours at a temperature of eighty degrees Fahrenheit (80° F.), then seven (7) hours at one hundred forty degrees Fahrenheit (140° F.), the internal pressure being maintained at atmospheric pressure the meanwhile.

7.5-S-1.203 Thickness of metal. The minimum thickness of metal for cargo tanks shall be as follows:

Tank capacity:	Minimum thickness in inches
Not more than 1,200 gallons.....	$\frac{1}{4}$
Over 1,200 to 1,800 gallons.....	$\frac{5}{16}$
Over 1,800 gallons.....	$\frac{3}{8}$

7.5-S-1.205 Joints. All joints and seams formed in the manufacture of any cargo tank shall be made tight by welding, riveting, riveting and welding, brazing, or riveting and brazing, at the option of the motor carrier, subject to the limitation that any of the aforesaid methods are permissible only when any one of them or combination as used in the tank is not subject to adverse action by the nature of the corrosive liquid which is to be transported in such tank.

7.5-S-1.206 Pressure tests.

7.5-S-1.2061 Tanks. Each completed cargo tank shall be tested before being put into transportation service by completely filling the tank and dome with water or other liquid having a similar viscosity, the temperature of which shall not exceed one hundred degrees Fahrenheit (100° F.) during the test, and applying a pressure of one and one half ($1\frac{1}{2}$) times the working pressure of the tank, minimum pressure, ten pounds per square inch (10 lbs./sq. in.) gage. The tank shall be capable of holding the prescribed pressure for at least ten (10) minutes without leakage, evidence of impending failure, or failure. All closures shall be in place while the test is made, and the pressure shall be gaged at the top of the tank.

7.5-S-1.2062 Heating systems. After any fluid type interior heating systems are installed and before the tanks to which they are fitted are placed in transportation service, the heating systems shall be tested with hydrostatic pressure and proved to be tight at two hundred pounds per square inch (200 lbs./sq. in.) gage.

7.5-S-1.207 Marking of cargo tanks by metal plates. The requirements of Specification 7.5-S-1.2 regarding marking are identical with those set forth in 7.3-S-1.207 of Specification 7.3-S-1.2, except that tanks shall be marked "I C C 7.5-S-1.2", instead of "I C C 7.3-S-1.2".

7.5-S-1.208 Tank outlets.

7.5-S-1.2081 No bottom outlets. No tanks, except those used for shipments of sludge acid or alkaline corrosive liquids, may have bottom discharge outlets.

7.5-S-1.2082 Bottom outlets. Bottom outlets or bottom washout chambers shall be of metal not subject to rapid deterioration by the lading, and each shall be provided with a valve or plug at its upper end and a liquid tight closure at its lower end. Every such valve or plug shall be such as to insure against unseating due to stresses or shocks incident to transportation.

7.5-S-1.2083 Bottom wash-out chambers. Tanks may be equipped with bottom wash-out chambers.

7.5-S-1.210 Venting, gaging, loading, and air inlet devices. When installed, venting, gaging, loading, and air inlet devices, including their valves, shall be provided with adequate means for their secure closure; and means shall also be provided for the closing of pipe connections of valves.

7.5-S-1.213 Shear section. There shall be provided between each shut-off valve seat and discharge faucet a shear section which will break under strain, unless the discharge piping is so arranged as to afford equivalent protection, and leave the shut-off valve seat intact in case of accident to the discharge faucet or piping.

7.5-S-1.214 Protection of valves. Draw-off valves and fittings of cargo tanks projecting beyond the frame, or if the vehicle be frameless, beyond the shell, at the rear, shall be adequately protected by steel bumpers or other equally effective devices, against collision.

7.5-S-1.216 Fittings, reinforcements, and other attachments not specified. All external attachments to any cargo tank shall be made of materials specified in "the Code" and constructed and attached as therein specified.

7.5-S-1.2161 Heater coils. Heater coils, when installed, shall be so constructed that the breaking off of their external connections will not cause leakage of contents of tanks.

7.5-S-1.217 Closures for manholes. The manhole cover shall be designed to provide a secure closure of the manhole. All covers, not hinged to the tanks, shall be attached to the outside of the dome by at least $\frac{1}{8}$ inch chain or its equivalent. All joints between manhole covers and their seats shall be made tight against leakage of vapor and liquid by use of gaskets of suitable material not subject to attack by the corrosive liquid to be transported in the tank.

Specification 7.5-S-1.3—Type B Cargo Tanks for the Transportation of Corrosive Liquids

7.5-S-1.3 General.

7.5-S-1.31 Individual containers. Each individual container comprising an aggregation of containers in a Type B

cargo tank to be used for the transportation of corrosive liquids shall comply with the requirements for such containers for the transportation of corrosive liquids as contained in the Regulations for Shippers of this Commission.

7.5-S-1.32 Securing means. Securing means shall be provided for each of the containers comprising a Type B cargo tank for the transportation of corrosive liquids, and such securing means shall be structurally adequate to support and hold such containers. Means shall also be provided for the securing of such containers, by the use of toggles latches, or other suitable devices, against motion relative to the vehicle during the course of transit of the cargo tank.

APPENDIX 7.6—COMPRESSED GASES

Table 7.6-1—Maximum Permitted Filling Densities for Cargo Tanks for the Transportation of Liquefied Petroleum Gases

Maximum specific gravity of the liquid material at 60° F.	Maximum filling density in percent of the water-weight capacity of the container (percent)
0.271-0.289	26
0.290-0.306	27
0.307-0.322	28
0.323-0.338	29
0.339-0.354	30
0.355-0.371	31
0.372-0.398	32
0.399-0.425	33
0.426-0.440	34
0.441-0.452	35
0.453-0.462	36
0.463-0.472	37
0.473-0.480	38
0.481-0.488	39
0.489-0.495	40
0.496-0.503	41
0.504-0.510	42
0.511-0.519	43
0.520-0.527	44
0.528-0.536	45
0.537-0.544	46
0.545-0.552	47
0.553-0.560	48
0.561-0.568	49
0.569-0.576	50
0.577-0.584	51
0.585-0.592	52
0.593-0.600	53
0.601-0.608	54
0.609-0.617	55
0.618-0.626	56
0.627-0.634	57

Filling densities indicated in the above table may be increased by not more than three (3) units in containers whose service pressure is eighteen hundred pounds per square inch (1,800 lbs./sq. in.) or more, provided that no such increased percentage shall result in any container being liquid full at one hundred thirty degrees Fahrenheit (130° F.).

Specification 7.6-S-1—Type A Cargo Tanks and Tank Motor Vehicles for the Transportation of Liquefied Petroleum Gases

7.6-S-1.0 Scope. This specification is primarily designed to apply to tank motor vehicles and Type A cargo tanks (including tank containers) to be used for the transportation of liquefied petroleum gases as defined in Rule 7.6001 of Section 7.6 of these regulations. Whenever reference is herein made to gases, it shall, unless otherwise indicated, be construed to refer to petroleum gases in either the liquid or gaseous state.

Whenever reference is herein made to the "Code", it shall be construed as referring to the Code for Unfired Pressure Vessels of the American Society of Mechanical Engineers, 1937 edition, except that, so far as cargo tanks designed for the transportation of non-corrosive compressed gases are concerned, Sections W and R of the A P I—A S M E Code for Unfired Pressure Vessels for Petroleum Liquids and Gases, 1938 Edition, may be substituted for like matters otherwise covered by the A S M E Code above referred to.

Specification 7.6-S-1.1—Tank Motor Vehicles

The requirements regarding tank motor vehicles for the transportation of compressed gases shall be identical with the requirements set forth in Specification 7.3-S-1.1.

Specification 7.6-S-1.2—Type A Cargo Tanks for the Transportation of Liquefied Petroleum Gases

7.6-S-1.201 General.

7.6-S-1.2011 Compliance with code.

Every cargo tank to which this Specification applies shall be designed and constructed in accordance with and fulfill the requirements of the Code except where this Specification sets forth requirements or options to the contrary. In addition to any other provision of this Specification, no container shall be so designed, constructed, repaired, or remodeled, as to cause ultimate leakage or cracks or likelihood of leakage or cracks, by areas of stress concentration due to shrinkage of cooling metal in welding operations, sharp fillets, reversal of stresses, or otherwise.

7.6-S-1.2012 Design working pressure.

The design working pressure of any unlagged Type A cargo tank shall not be less than the vapor pressure of the gas which is to be transported in it at one hundred degrees Fahrenheit (100° F.).

7.6-S-1.202 Material.

7.6-S-1.2021 Plates, straps, heads, and domes.

Plates, straps, heads, and domes, shall be of material as specified in the Code and, in addition, shall be free of seams, cracks, laminations, or any other defects likely to be injurious to the finished tank.

7.6-S-1.2022 Piping.

Piping shall be full weight wrought iron, steel, copper or brass pipe or seamless drawn tubing. The bursting strength of the piping and fittings shall in any event be no less than five (5) times the tank working pressure, and no less than four (4) times that pressure to which, in any instance, it may be subjected in service, by the action of a pump or other device (not including safety valves) the action of which may be to subject certain portions of the tank piping to pressures greater than the tank working pressure. Joints in copper tubing shall be of the sweated soldered type or of an equally strong metal union type. Such joints shall in any event be of such a character as not to decrease the strength of the tubing, as by the cutting

of threads. Suitable provision shall in every case be made to allow the piping to expand and/or contract due to changes in temperature. Slip joints shall not be used for this purpose.

7.6-S-1.203 Thickness of plates, straps, heads and domes. The plates, straps, heads and domes used in any cargo tank to which this Specification applies shall be constructed in accordance with the Code, except that Table U-3 therein shall not be used. The value of working stress in such parts at the working pressure of the tank shall not exceed one-fifth ($\frac{1}{5}$) of the ultimate strength of the material; the safety factor shall be at least five (5).

7.6-S-1.205 Method of joining plates and anchoring shell.

7.6-S-1.2051 Joining plates. In the manufacture of Type A cargo tanks, all plates shall be joined, and all accessories shall be attached, by the methods specified in the Code, except that single welded lap weld joints are not permissible.

7.6-S-1.2052 Anchoring shell. Suitable "hold-down" devices shall be provided which will anchor each Type A cargo tank used as part of any tank motor vehicle of other than the "frameless" type in a suitable and safe manner that will not introduce undue concentration of stresses. These devices shall incorporate turnbuckles or similar positive devices for drawing the tank down tight on the frame of the motor vehicle. Suitable stops shall be so attached to the truck or trailer and/or the cargo tank as to prevent dislodgment from the mounting due to stopping, starting, or changes in direction. The cargo tank of any "frameless" motor vehicle shall be so anchored to the other units of the vehicle as permanently to prevent relative shifting between the tank and such other units due to stopping, starting, and changes in direction.

7.6-S-1.206 Testing.

7.6-S-1.2061 Tests of cargo tanks.

Every cargo tank before being placed in transportation service, shall be tested in accordance with the requirements of the Code for such tests, except that it shall be hydrostatically tested at twice the working pressure of such cargo tank.

7.6-S-1.2062 Tests of accessories.

All piping, valves, pumps, and fittings on every tank (or tank container) shall be tested after installation and proven tight at twice the working pressure of the tank. For purposes of this test, safety valves shall be clamped, plugged, or otherwise rendered inoperative; such clamps, plugs and similar devices shall be removed immediately after the final test is finished. In the event of replacement, all such piping, valves, or fittings so replaced shall be tested in accordance with the requirements of this rule before the container is returned to transportation service. The requirements of this rule shall apply with equal force to all hose used on such containers, except that hose may be so tested either before or after installation on the tank.

7.6-S-1.207 Marking.

7.6-S-1.2071 *Marking of cargo tanks by metal plates.* The requirements of Specification 7.6-S-1.2 regarding marking are identical with those set forth in 7.3-S-1.207 of Specification 7.3-S-1.2, except that tanks shall be marked "I C C 7.6-S-1.2", instead of "I C C 7.3-S-1.2", and except that the working pressure of the tank shall, additionally, be marked on the metal plate.

7.6-S-1.2072 *Marking of gaging devices.* Each adjustable gaging device or container equipped with such a gaging device shall be clearly, legibly, and permanently marked in increments of not less than 20° F., with the maximum levels to which it can be filled with liquid at temperatures between 20° F. and 130° F. The 130° F. line shall be so located that the liquid portion of the gas shall not completely fill the container at 130° F.

7.6-S-1.208 *Loading and unloading accessories.*

7.6-S-1.2081 *Pumps.* Pumps must be of suitable design, properly protected against breakage by collision, and kept in good condition. They may be driven by truck motor power take off or other proper mechanical, electrical, or hydraulic means. Unless they are of the centrifugal type, they shall be equipped with suitable pressure actuated by-pass valves permitting flow from pump discharge to pump suction when the pump discharge pressure exceeds the tank pressure by more than one hundred pounds per square inch (100 lbs./sq. in.).

7.6-S-1.2082 *Hose.* All hose, wherever used, shall be fabricated of materials not susceptible to deterioration due to contact with the commodity to be transported in the tank, and shall be designed for a bursting pressure not less than five (5) times the working pressure of the tank with which it is used, and not less than four (4) times that pressure to which, in any instance, it may be subjected in service by the action of a pump or other device, the action of which may be to subject the hose to pressures greater than the tank working pressure. Any coupling used on hose to make connections shall be designed for a working pressure not less than twenty percent (20%) in excess of the working pressure of the hose, and shall be so designed that there will be no leakage when connected. In addition to the shut-off valve installed in the discharge line at the tank, there shall be a shut-off valve at the discharge end of the discharge hose.

7.6-S-1.2083 *Filling and discharge lines and valves.* Filling connections shall be provided with a suitable automatic excess flow valve or other automatic valve affording equivalent protection to prevent any appreciable back flow in case the filling is broken. Similarly, the discharge outlet shall be provided with such a valve or other device to prevent discharge of contents in case connections are broken. In either case, these automatic valves shall be located inside the tank or at a point outside where the line enters

or leaves the tank. In the case such valve is located outside the tank, the installation shall be made in such a manner that any undue strain beyond the automatic valve will cause breakage on the discharge end, and not between the container and the valve.

7.6-S-1.2084 *Shut-off valves and gages.* Filling and discharge lines shall be provided with shut-off valves located as close to the tank as is practicable. The use of so-called "stop-check" valves to satisfy with one valve the requirements of this rule and of 7.6-S-1.2083 of this Specification is forbidden.

Gage glasses are forbidden.

Each container shall be provided with a suitable pressure gage.

Pressure gages and other connections shall be fitted with suitable automatic excess flow valves, except that no such valve may be connected with any safety valve.

7.6-S-1.2085 *Safety valves.*

7.6-S-1.20851 *Must be free venting—effective discharge area—table.* Every container shall be provided with one or more spring-loaded safety valves, arranged to afford free vent of vapor to the outer air, and with a discharge area sufficient to prevent building up pressures in excess of 150 percent of the tank working pressure. In no case, shall the effective discharge area be less than that specified in the following table:

Table 7.6-S-1.20851: Effective Discharge Area Required for Safety Relief Valves

[D=outside diameter of tank in feet; U=overall length of tank in feet; "A"—the product of D times U]

Tank working pressure, pounds per square inch	Minimum required free discharge area (square inches)		
	80 or less	125 or less	Over 125
Where "A" does not exceed 10.....	0.32	0.22	0.16
Where "A" is greater than 10 but not more than 15.....	.46	.30	.21
Where "A" is greater than 15 but not more than 20.....	.60	.42	.29
Where "A" is greater than 20 but not more than 40.....	1.25	.89	.57
Where "A" is greater than 40 but not more than 60.....	1.90	1.25	.83
Where "A" is greater than 60 but not more than 80.....	2.50	1.68	1.10
Where "A" is greater than 80 but not more than 100.....	3.15	2.13	1.40
Where "A" is greater than 100 but not more than 120.....	3.80	2.48	1.65
Where "A" is greater than 120 but not more than 140.....	4.45	2.90	1.90
Where "A" is greater than 140 but not more than 160.....	5.10	3.33	2.15
Where "A" is greater than 160 but not more than 180.....	5.80	3.55	2.40
Where "A" is greater than 180 but not more than 200.....	6.05	3.77	2.50
Where "A" is greater than 200.....			

¹ To be calculated, using Fetterley's Formula as promulgated by Bureau of Explosives, New York City.

7.6-S-1.20852 *Sealing and provision against tampering.* Safety valves shall be arranged so that tampering will be minimized, and, if the pressure setting or adjustment is external, the safety valves shall be provided with suitable means for sealing the adjustment.

7.6-S-1.20853 *Setting and marking.* Safety valves shall be set at a pressure not lower than the tank working pressure and not higher than one hundred and twenty-five percent (125%) thereof. Each safety valve shall be legibly and permanently marked to indicate the pressure in pounds per square inch gage at which the valve is set to open and the actual free discharge area in square inches of the safety valve. (For example, 80-S-1.25)

No shut-off valve shall be installed between tanks and safety valves.

7.6-S-1.2086 *Fixed gaging devices.* If a fixed dip tube or fixed maximum liquid level device is the only gaging device provided, it shall be arranged to function at not to exceed ninety-seven percent (97%) of the maximum permitted loading level indicated in Table 7.6-1 of Appendix 7.6 of these regulations.

7.6-S-1.214 *Protection of valves and fittings.* All piping, valves, hose, pumps, and other pressure containing appurtenances used on any cargo tank to which this Specification applies shall be so arranged as to be protected from damage due to collision at any time. The protection shall consist of locating such appurtenances within the tank itself, or within the motor vehicle frame, or a suitable collision resisting subframe, guard, or housing.

Specification 7.6-S-1.3—Type B Cargo Tanks for the Transportation of Compressed Gases

7.6-S-1.3 *General.*

7.6-S-1.31 *Individual containers.*

Each individual container comprising an aggregation of containers in a Type B cargo tank to be used for the transportation of compressed gases shall comply with the requirements for such container for the transportation of compressed gases as contained in the Regulations for Shippers of this Commission.

7.6-S-1.32 *Securing means.* Securing means shall be provided for each of the containers comprising a Type B cargo tank for the transportation of compressed gases, and such securing means shall be structurally adequate to support and hold such containers. Means shall also be provided for the securing of such containers, by the use of toggles, latches, or other suitable devices, against motion relative to the vehicle during the course of transit of the cargo tank.

APPENDIX 7.7—POISONS

Specification 7.7-S-1—Tank Motor Vehicles and Type A Cargo Tanks for the Transportation of Less Dangerous Poisons—Class B

Specification 7.7-S-1.1—Tank Motor Vehicles

The requirements regarding tank motor vehicles for the transportation of less dangerous poisons, Class B, shall be identical with the requirements set forth in Specification 7.3-S-1.1.

Specification 7.7-S-1.2—Type A Cargo Tanks for the Transportation of Less Dangerous Poisons—Class B, Having the Properties of an Inflammable Liquid as Defined in Rule 7.3001

Cargo tanks for the transportation of less dangerous poisons, Class B, having the properties of an inflammable liquid as defined in Rule 7.3001 of Section 7.3 of these regulations shall comply with the requirements set forth in Specification 7.3-S-1.

Specification 7.7-S-1.3—Type B Cargo Tanks for the Transportation of Poisons

7.7-S-1.3 General.

7.7-S-1.31 Individual containers. Each individual container comprising an aggregation of containers in a Type B cargo tank to be used for the transportation of poisons shall comply with the requirements for such containers for the transportation of poisons as contained in the Regulations for Shippers of the Commission.

7.7-S-1.32 Securing means. Securing means shall be provided for each of the containers comprising a Type B cargo tank for the transportation of poisons, and such securing means shall be structurally adequate to support and hold such containers. Means shall also be provided for the securing of such containers, by the use of toggles, latches, or other suitable devices, against motion relative to the vehicle during the course of transit of the cargo tank.

[F. R. Doc. 40-1548; Filed, April 18, 1940; 10:02 a. m.]

Notices

DEPARTMENT OF THE INTERIOR.

Bureau of Reclamation.

LOWER YELLOWSTONE PROJECT, MONTANA-NORTH DAKOTA

ADVERTISEMENT OF LANDS FOR LEASE

APRIL 17, 1940.

1. Sealed proposals will be received at the office of the Bureau of Reclamation, Washington, D. C., until 2 P. M., May 1, 1940, for the lease for residential, agricultural and grazing purposes of the NW $\frac{1}{4}$ of Sec. 28, T. 20 N., R. 58 E., M. P. M., Montana. The tract contains 60 acres of agricultural lands for which water will be delivered for irrigation by the Lower Yellowstone Irrigation District No. 1, and 78 acres of grazing land. The improvements located on the tract consists of a one story house which contains four rooms and bath, 28' x 31' with a 6' x 16' porch, shingle roof and drop siding; barn 28' x 36' with shingle roof and drop siding; bunk house 32' x 19', containing three rooms; garage 22' x 11' with shingle roof and siding, well, and a fence around the outside.

2. The tract will be leased for the period ending December 31, 1940, the lessee having no option to renew. The successful bidder will be required to pay \$72.93 to the Lower Yellowstone Irrigation District No. 1, in payment for the water charges due for the season of 1940 and will also be required to insure the buildings on said premises against loss by fire, loss payable to the United States as its interests may appear, for not less than \$1,500, in some reliable fire insurance company.

3. Bids must be accompanied by payment in full. Funds so remitted by unsuccessful bidders will be returned on making of award. Remittance should be made in the form of certified check, bank draft, or money order, drawn in favor of the "Bureau of Reclamation."

4. Those desiring to bid should first consult a copy of the lease form on file at the office of the Manager, Lower Yellowstone Board of Control, at Sidney, Montana, which lease must be promptly executed before possession of the land is given, and which describes various rights reserved by the United States, and other details not herein enumerated, to which the lessee must agree.

5. Envelopes containing bids must be sealed, marked and addressed as follows:

BID FOR LEASE OF LAND, LOWER YELLOWSTONE PROJECT, MONTANA-NORTH DAKOTA, TO BE OPENED AT 2 P. M., Eastern Standard Time, May 1, 1940.

H. W. BASHORE,
Assistant Commissioner.

[F. R. Doc. 40-1587; Filed, April 22, 1940; 9:45 a. m.]

SALT RIVER PROJECT, ARIZONA

ADVERTISEMENT OF LANDS FOR LEASE

APRIL 17, 1940.

1. Sealed proposals will be received at the office of the Bureau of Reclamation, Washington, D. C., until 2 o'clock P. M., May 1, 1940, for the lease of the following tract of land for grazing purposes:

T. 2 N., R. 6 E., G. & S. R. M., Arizona

	Acres
Sec. 13, All South of South Canal and Granite Reef dam reserve	140
Sec. 22, All South of Great Eastern Canal	30
Sec. 23, All South of Great Eastern Canal and South Canal	500
Sec. 24, All South of South Canal	630
	1,300

2. The land will be leased for the period ending December 31, 1940, the lessee having no option to renew.

3. Bids must be accompanied by payment in full. Funds so remitted by unsuccessful bidders will be returned on making of award. Remittance should be in the form of certified check, bank draft, or money order, drawn in favor of "Bureau of Reclamation". No bids of less than five cents per acre will be accepted for these grazing lands.

4. Those desiring to bid should first consult a copy of lease form 7-523 A-G, on file at the office of the Salt River Valley Water Users' Association, Water Users' Building, Phoenix, Arizona, which lease must be promptly executed by successful bidders before possession of land is given, and which describes various rights reserved by the United States, and other details not herein enumerated, to which the lessee must agree.

5. Envelopes containing bids must be sealed, marked and addressed as follows:

BID FOR LEASE OF LAND, SALT RIVER PROJECT, ARIZONA, TO BE OPENED AT 2 P. M., Eastern Standard Time, May 1, 1940.

H. W. BASHORE,
Assistant Commissioner.

[F. R. Doc. 40-1588; Filed, April 22, 1940; 9:45 A. M.]

National Park Service.

ORDER DESIGNATING THE APPOMATTOX COURT HOUSE NATIONAL HISTORICAL MONUMENT, VIRGINIA

Whereas the act of Congress approved August 13, 1935 (49 Stat. 613), authorizes the establishment of Appomattox Court House National Historical Monument when title to all the land, structures, and other property within a distance of one and one-half miles from the Appomattox Court House site, Virginia, as shall be designated by the Secretary of the Interior, shall have been vested in the United States in fee simple; and

Whereas a fee simple title to all the land necessary or desirable for the establishment of the said monument is vested in the United States:

Now, therefore, I, Harold L. Ickes, Secretary of the Interior, under and by virtue of the authority conferred upon the Secretary of the Interior by the said act of August 13, 1935, do hereby designate the following-described land with the structures thereon to be the Appomattox Court House National Historical Monument:

All that certain area known as the "Appomattox Surrender Ground" lying around the village of Old Appomattox Court House in Clover Hill Magisterial District, Appomattox County, Virginia, situated about two miles east of Appomattox, Virginia, on both sides of State Highway 24, on the headwaters of Appomattox River, and more particularly described as follows:

Beginning at corner 1, common to the Gallilee Church parcel and in the right-of-way of State Highway 24; thence with said right-of-way N. 62°59' E., 1.80 chains to corner 2; thence northeasterly to the right along a 2°2' curve 10.27 chains to corner 3; thence N. 76°46' E., 32.57 chains to corner 4; thence S. 0°36' W., 2.87 chains to corner 5; thence N. 81°18' E., 3.62 chains to corner 6, which is a corner common to Tract No. 142 and the Herman Church Lot; thence N. 8°02' W., 3.09

chains to corner 7; thence N. 76°46' E., 3.76 chains to corner 8; thence N. 76°46' E., 0.07 chains to corner 9; thence N. 76°46' E., 0.15 chains to corner 10; thence N. 76°46' E., 1.62 chains to corner 11; thence northeasterly to the left along a 1° curve 5.34 chains to corner 12; thence N. 73°13' E., 2.11 chains to corner 13; thence N. 73°12'30" E., 11.35 chains to corner 14; thence northeasterly along the center of the Old Richmond Stage Road at 11.69 chains, crossing north right-of-way line of State Highway 24, in all 13.54 chains to corner 15; thence N. 64°48' E., 4.88 chains to corner 16; thence N. 74°37' E., 1.05 chains to corner 17; thence N. 1°19' W., 5.75 chains to corner 18; thence S. 86°40' W., 4.33 chains to corner 19; thence N. 16°40' E., 0.99 chains to corner 20; thence N. 26°48' E., 2.88 chains to corner 21; thence N. 44°55' E., 4.04 chains to corner 22; thence easterly down a spring branch with its meanders 8.56 chains to corner 23; thence easterly down said spring branch with its meanders 14.44 chains to corner 24; thence S. 11°30' E., 11.00 chains to corner 25; thence westerly along north right-of-way line of State Highway No. 24, 9.66 chains to corner 26; thence S. 1°48' E., at 0.45 chains crossing center line of State Highway 24, in all 1.43 chains to corner 27; thence N. 89°52' E., 0.32 chains to corner 28; thence easterly to the left along a 7° curve 3.95 chains to corner 29; thence S. 23°24' E., 0.23 chains to corner 30; thence northeasterly to the left along a 7° curve 2.14 chains to corner 31; thence N. 51°59' E., 3.06 chains to corner 32; thence N. 51°35' E., 0.55 chains to corner 33; thence N. 51°35' E., 10.60 chains to corner 34; thence northeasterly to the left along a 4° curve 13.97 chains to corner 35; thence northeasterly along a 4° curve 0.40 chains to corner 36; thence N. 14°22' E., 2.71 chains to corner 37; thence S. 75°10' E., 1.50 chains to corner 38; thence N. 15°20' E., at 2 chains crossing the Appomattox River, in all 3.38 chains to corner 39; thence N. 75°25' W., 1.48 chains to corner 40; thence N. 14°07' E., 5.98 chains to corner 41; thence N. 14°39' E., 6.81 chains to corner 42; thence N. 14°36' E., 4.29 chains to corner 43; thence northeasterly to the right along a 2° curve 7.17 chains to corner 44; thence N. 24°15' E., 17.34 chains to corner 45; thence northeasterly to the right along a 4° curve 9.13 chains to corner 46; thence N. 49°02' E., 12.00 chains to corner 47; thence northeasterly along the center of the Old Richmond Road and the meanders thereof 6.08 chains to corner 48; thence N. 41°20' W., 2.41 chains to corner 49; thence southeasterly along the center of Old Mill Road and the meanders thereof 25.72 chains to corner 50; thence S. 20°39' W., 39.66 chains to corner 51, a point in the center of the Appomattox River at an old ford; thence southeasterly down said Appomattox River as it meanders 41.80 chains to corner 52, a point in the center of said Appomattox River at an old road; thence

southerly along the center of said old road and the meanders thereof 13.62 chains to corner 53; thence S. 75°30' W., 18.82 chains to corner 54; thence S. 71°36' W., 3.45 chains to corner 55; thence S. 68°19' W., 14.32 chains to corner 56; thence N. 72°55' W., 7.52 chains to corner 57; thence S. 38°24' W., 33.19 chains to corner 58; thence S. 50°55' W., 5.15 chains to corner 59; thence S. 44°35' W., 17.19 chains to corner 60; thence S. 82°14' W., 40.57 chains to corner 61; thence S. 59°41' W., 0.66 chains to corner 62; thence southwesterly up Plain Run Branch with meanders thereof 7.79 chains to corner 63; thence westerly up center of Plain Run Branch and meanders thereof 57.83 chains to corner 64; thence westerly up said branch with meanders thereof 21.12 chains to corner 65; thence N. 22°38' W., 29.39 chains to corner 66; thence N. 22°48' W., 2.27 chains to place of beginning, excluding therefrom the Raine Monument, the Confederate Cemetery and the Presbyterian Church lot described as follows: Beginning at the northwest corner in center of State secondary road No. 627, which is south 10.09 chains from corner 33 on south right-of-way line of State Highway No. 24; thence N. 89°56' E., 2.45 chains to a set stone in old hedge row; thence S. 02°32' W., 4.23 chains to a stake in a pile of stones; thence N. 69°03' W., 2.25 chains to a point in center of State secondary road No. 627; thence with said road N. 02°43' W., 3.42 chains to the place of beginning, containing 970.30 acres more or less.

The administration, protection, and development of the Appomattox Court House National Historical Monument shall be exercised under the direction of the Secretary of the Interior by the National Park Service, subject to the provisions of the Act of August 25, 1916, entitled "An Act To establish a National Park Service, and for other purposes, as amended."

Warning is expressly given to all unauthorized persons not to appropriate, injure, destroy, deface, or remove any feature of this national monument.

In witness whereof I have hereunto set my hand and caused the official seal of the Department of the Interior to be affixed in the City of Washington, this 10th day of April 1940.

[SEAL] HAROLD L. ICKES,
Secretary of the Interior.

[F. R. Doc. 40-1589; Filed, April 22, 1940; 9:45 a. m.]

DEPARTMENT OF AGRICULTURE.

Federal Surplus Commodities Corporation.

DESIGNATION OF AREAS UNDER SURPLUS FOOD STAMP PROGRAM

Pursuant to the applicable regulations and conditions prescribed by Henry A.

Wallace, Secretary of Agriculture of the United States of America, the following areas are hereby designated as areas in which food order stamps may be used:

The area within the county limits of Duval County, Florida.

The area within the city limits of Baltimore, Maryland.

The area within the county limits of Chatham County, Georgia.

The area within the county limits of Travis County, Texas.

The area within the county limits of Natrona County, Wyoming.

The area within the county limits of Sheridan County, Wyoming.

The area within the county limits of Okmulgee County, Oklahoma.

The area within the city limits of Newark, New Jersey.

The area within the county limits of Oklahoma County, Oklahoma.

The area within the county limits of Tulsa County, Oklahoma.

The area within the county limits of Wake County, North Carolina.

The area within the county limits of Linn County, Iowa.

The effective dates for the above-mentioned areas shall be announced by the local representative of the Federal Surplus Commodities Corporation for the respective areas in local newspapers of general circulation.

[SEAL] PHILIP F. MAGUIRE,
Executive Vice President, Federal
Surplus Commodities Corporation.

APRIL 18, 1940.

[F. R. Doc. 40-1593; Filed April 22, 1940; 11:01 a. m.]

DEPARTMENT OF LABOR.

Wage and Hour Division.

NOTICE OF ISSUANCE OF SPECIAL CERTIFICATES FOR THE EMPLOYMENT OF LEARNERS

Notice is hereby given that Special Certificates authorizing the employment of learners at hourly wages lower than the minimum wage rate applicable under section 6 of the Fair Labor Standards Act of 1938 are issued under section 14 of the said Act and § 522.5 of Regulations Part 522, as amended, to the employers listed below effective April 23, 1940. These Certificates may be canceled in the manner provided for in the Regulations and as indicated in the Certificate. Any person aggrieved by the issuance of any of these Certificates may seek a review of the action taken in accordance with the provisions of §§ 522.13 or 522.5 (b), whichever is applicable of the aforementioned Regulations.

The employment of learners under these Certificates is limited to the occupations, learning periods, and minimum wage rates specified in the Determination or Order for the Industry designated be-

low opposite the employer's name and published in the FEDERAL REGISTER as here stated:

Regulations, Part 522, May 23, 1939 (4 F.R. 2088), and as amended October 12, 1939 (4 F.R. 4226).

Hosiery Order, August 24, 1939 (4 F.R. 3711).

Apparel Order, October 12, 1939 (4 F.R. 4225).

Knitted Wear Order, October 24, 1939 (4 F.R. 4351).

Textile Order, November 8, 1939 (4 F.R. 4531).

Glove Order, February 20, 1940 (5 F.R. 714).

Telephone Order, April 9, 1940 (5 F.R. 1371).

NAME AND ADDRESS OF FIRM, INDUSTRY, PRODUCT, NUMBER OF LEARNERS, AND EXPIRATION DATE

Chalfont Hosiery Mills, Chalfont, Pennsylvania; Hosiery; Full Fashioned; 12 learners; September 18, 1940.

Longmeadow Mills, 311 Page Boulevard, Springfield, Massachusetts; Hosiery; Full Fashioned; 24 learners; September 18, 1940.

Samalto Hosiery Mill, 203 South Fourth Street, Perkasio, Pennsylvania; Hosiery; Full Fashioned; 2 learners; September 18, 1940.

C & S Manufacturing Company, 151 East Street, New Haven, Connecticut; Apparel; Pajamas; 5 learners; October 24, 1940.

C & S Manufacturing Company, 151 East Street, New Haven, Connecticut; Apparel; Pajamas; 25 learners; August 20, 1940.

Co-Ed Frocks, Incorporated, Alton, Illinois; Apparel; House Dresses and Cotton Sportwear; 15 learners; August 20, 1940.

Co-Ed Frocks, Incorporated, Shelbyville, Illinois; Apparel; House Dresses and Cotton Sportwear; 25 learners; August 20, 1940.

Crystal Springs Shirt Corporation, Crystal Springs, Mississippi; Apparel; Shirts; 5 per cent; October 24, 1940.

Hansley Mills, Barnesville, Ohio; Apparel; Athletic Underwear and Polo Shirts; 5 per cent; October 24, 1940.

Samson, Polay and Goodman, 3111 West Allegheny Avenue, Philadelphia, Pennsylvania; Apparel; Wash and Sport Dresses; 1 learner; October 24, 1940.

Empire Knitting Mills, Inc., Statesville, North Carolina; Knitted Wear; Sweaters; 5 learners; October 24, 1940.

E-Cut Knitting Mills, Royersford, Pennsylvania; Knitted Wear; Knit Underwear; 5 learners; October 24, 1940.

Wells Lamont Smith Corporation, Burlington, Iowa; Glove; Work Gloves; 7 learners; October 24, 1940.

Wells Lamont Smith Corporation, Louisiana, Missouri; Glove; Work Gloves; 8 learners; October 24, 1940.

Lincoln Telephone and Telegraph Company, 1342 M Street, Lincoln, Nebraska; Independent Branch of the Tele-

phone Industry; to employ learners (as indicated in the Telephone Order) as commercial and switchboard operators until December 31, 1940, at the following exchanges owned by the company:

Lincoln Exchange, 1342 M Street, Lincoln, Nebraska.

Ashland Exchange, Ashland, Nebraska.

Auburn Exchange, Auburn, Nebraska.

Beatrice Exchange, Beatrice, Nebraska.

David City Exchange, David City, Nebraska.

Fairbury Exchange, Fairbury, Nebraska.

Geneva Exchange, Geneva, Nebraska.

Hastings Exchange, Hastings, Nebraska.

Hebron Exchange, Hebron, Nebraska.

Humboldt Exchange, Humboldt, Nebraska.

Nebraska City Exchange, Nebraska City, Nebraska.

Plattsmouth Exchange, Plattsmouth, Nebraska.

Seward Exchange, Seward, Nebraska.

Superior Exchange, Superior, Nebraska.

Tecumseh Exchange, Tecumseh, Nebraska.

Wahoo Exchange, Wahoo, Nebraska.

Wymore Exchange, Wymore, Nebraska.

York Exchange, York, Nebraska.

Signed at Washington, D. C., this 22nd day of April 1940.

MERLE D. VINCENT,
Authorized Representative
of the Administrator.

[F. R. Doc. 40-1600; Filed, April 22, 1940;
11:57 a. m.]

FEDERAL POWER COMMISSION.

[Docket No. G-155]

IN THE MATTER OF FRANK M. PIERSON NATURAL GAS CORPORATION

ORDER FIXING DATE OF HEARING AND ALLOWING INTERVENTION

APRIL 16, 1940.

Commissioners: Leland Olds, Chairman; Claude L. Draper, Basil Manly, John W. Scott, Clyde L. Seavey.

It appearing to the Commission that:

(a) On February 5, 1940, Frank M. Pierson Natural Gas Corporation filed with this Commission a petition praying that the Commission issue an order requiring Kentucky Natural Gas Corporation to establish a physical connection with facilities of Frank M. Pierson Natural Gas Corporation for the purpose of the sale of natural gas by Kentucky Natural Gas Corporation to Frank M. Pierson Natural Gas Corporation;

(b) The said Kentucky Natural Gas Corporation is a natural-gas company transporting and selling natural gas in interstate commerce and maintaining facilities for the same in and near the area proposed to be served by Frank M. Pierson Natural Gas Corporation;

(c) By a letter dated March 15, 1940, transmitted to this Commission, Kentucky Natural Gas Corporation has stated its unwillingness to make a physical connection as aforesaid unless this Commission shall affirmatively order it to do so, the said company having asserted that its unwillingness to make this connection was based upon a provision contained in a contract between it and Indiana Gas & Chemical Corporation alleged to have the effect of reserving to the said corporation and Indiana Gas Utilities Company a certain territory including the area proposed to be served by Frank M. Pierson Natural Gas Corporation;

(d) On March 16, 1940, Indiana Gas Utilities Company, one of the parties indicated as being affected by the aforesaid contract between Kentucky Natural Gas Corporation and the Indiana Gas & Chemical Corporation, filed a petition with this Commission for leave to intervene herein;

(e) It is in the public interest to hold a public hearing herein for the purpose of determining the issues raised;

(f) The participation of Indiana Gas Utilities Company in this proceeding may be in the public interest;

The Commission orders that:

(A) A public hearing upon the issues herein shall be held commencing on May 20, 1940, at 10 o'clock a. m., in the Hearing Room of the Federal Power Commission located at 1757 K Street NW., in the City of Washington, D. C., for the purpose of determining whether it is necessary or desirable in the public interest that Kentucky Natural Gas Corporation establish physical connection of its transportation facilities with the facilities of Frank M. Pierson Natural Gas Corporation and sell natural gas to said corporation.

(B) Indiana Gas Utilities Company be and it is hereby permitted to become an intervener and party to this proceeding subject to the rules and regulations of this Commission; *Provided, however*, That the admission of the said company as an intervener and party shall not be construed as recognition by the Commission that such party might be aggrieved by any order of the Commission issued in this proceeding.

By the Commission.

[SEAL]

LEON M. FUQUAY,
Secretary.

[F. R. Doc. 40-1581; Filed, April 19, 1940;
3:26 p. m.]

[Docket No. IT-5635]

IN THE MATTER OF OTTER TAIL POWER COMPANY

NOTICE OF APPLICATION

APRIL 19, 1940.

Notice is hereby given that on April 19, 1940, an application was filed with the

Federal Power Commission, pursuant to section 204 of the Federal Power Act, by Otter Tail Power Company, a corporation organized under the laws of the State of Minnesota and doing business in the States of Minnesota, North Dakota and South Dakota, with its principal business office at Fergus Falls, Minnesota, seeking an order authorizing the issuance of not to exceed 13,346 of its \$4.50 dividend preferred shares of no par value in exchange for the outstanding \$5.50 dividend preferred shares which will be called for redemption on July 1, 1940, and to borrow from banks not to exceed \$900,000.00; all as more fully appears in the application on file with the Commission.

Any person desiring to be heard or to make any protest in reference to said application should, on or before the 6th day of May 1940, file with the Federal Power Commission a petition or protest in accordance with the Commission's Rules of Practice and Regulations.

[SEAL]

LEON M. FUQUAY,
Secretary.

[F. R. Doc. 40-1592; Filed, April 22, 1940;
10:43 a. m.]

INTERSTATE COMMERCE COMMISSION.

ORDER IN THE MATTER OF RULES AND INSTRUCTIONS FOR THE INSPECTION AND TESTING OF LOCOMOTIVES AND TENDERS IN ACCORDANCE WITH ACT OF FEBRUARY 17, 1911, AMENDED MARCH 4, 1915, JUNE 7, 1924, AND JUNE 27, 1930

Present: William J. Patterson, Commissioner, to whom the above-entitled matter has been assigned for action thereon.

Whereas Rule 116 (b) of the Rules and Instructions for the Inspection and Testing of Steam Locomotives and Tenders and their Appurtenances reads as follows:

"Road locomotives used in regions where snowstorms are generally encountered shall be provided with what is known as a 'clear vision' window, which is a window hinged at the top and placed in the glass in each front cab door or window. These windows shall be not less than 5 inches high, located as nearly as possible in line of the enginemen's vision, and so constructed that they may be easily opened or closed."

And whereas it appears desirable for purposes of uniformity and the promotion of safety of employees and travelers upon railroads to amend Rule 116 (b).

It is ordered, That each and every common carrier by railroad subject to the provisions of the Locomotive Inspection Law, as amended March 4, 1915, June 7, 1924, and June 27, 1930, and all other interested parties be, and they are hereby, cited to show cause, if any there be, by a formal return filed with the

Commission on or before July 1, 1940, as to why said Rule 116 (b) should not be amended to read as follows:

"The front cab doors or windows of road locomotives used in regions where snowstorms are generally encountered shall be provided with what is known as a 'clear vision' window, or an appliance that will clean the outside of such doors or windows over sufficient area to provide a clear view of track and signals ahead. If a 'clear vision' window is used it shall be not less than 5 inches high located as nearly as possible in line of the engineman's vision and so constructed and fitted that it may be easily opened, closed and fastened in desired position."

It is further ordered, That a copy of this order shall be served upon each and every common carrier by railroad subject to the Locomotive Inspection Law, as amended, and upon all national organizations of railroad employees, and that notice be given to the general public by depositing a copy of this order in the office of the Secretary of the Commission at Washington, D. C.

Dated at Washington, D. C., this 12th day of April, A. D. 1940.

By the Commission, Commissioner Patterson.

[SEAL]

W. P. BARTEL,
Secretary.

[F. R. Doc. 40-1598; Filed, April 22, 1940;
11:23 a. m.]

SECURITIES AND EXCHANGE COMMISSION.

United States of America—Before the Securities and Exchange Commission

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 19th day of April, A. D. 1940.

[File No. 70-19]

IN THE MATTER OF THE TOLEDO EDISON COMPANY

ORDER GRANTING APPLICATION

The Toledo Edison Company, a subsidiary of Toledo Light & Power Company, a registered holding company and a subsidiary of Cities Service Power & Light Company, a registered holding company, having filed an application and amendments thereto under section 6 (b) of the Public Utility Holding Company Act of 1935 for exemption from the provisions of section 6 (a) of that Act with respect to the issue and sale of \$3,000,000 principal amount of First Mortgage Bonds, 3¼% Series due 1970 and \$7,250,000 principal amount of 3½% Sinking Fund Debentures due 1960; public hearing thereon having been duly held after appropriate notice; the record in this matter having been duly consid-

ered; and the Commission having filed its findings herein;

It is ordered, That such application be granted and that the applicant be exempted from the provisions of section 6 (a) regarding the issuance of such securities, subject, however, to the following conditions:

(1) That the issues and sales shall be effected in accordance with the terms and conditions and for the purposes represented by said application.

(2) That such exemption shall immediately terminate without further order of this Commission if at any time the authorization of the issue and sale of the bonds and debentures by the Public Utilities Commission of Ohio shall be revoked or otherwise terminated.

(3) "That when all expenses, incurred in connection with the issue and sale of the securities and the preparation and prosecution of the applications concerned with the present transactions shall be actually paid, the applicant shall file a detailed statement of such expenses showing the names of persons or entities to whom such payments were made, the amounts of such payments, the accounts charged and a detailed description of the services rendered for which such payments were made."

(4) So long as any of the 3½% sinking fund debentures due 1960 shall be outstanding the applicant will not declare or pay any dividends (other than dividends payable in shares of its common stock) on any shares of its common stock unless the earned surplus after making such declaration is equal to or greater than the sum of (1) the earned surplus at December 31, 1939 of \$2,830,455.33 and (2) an amount at the rate of \$362,500 per annum (being equal to the aggregate annual principal amount of the 3½% sinking fund debentures due 1960 to be retired through the sinking fund); Provided, however, That such earned surplus required to remain after declaration of such dividends may be reduced for the purpose of this computation by the amount of any surplus adjustments resulting from the writing-down or writing-off of (a) excess of cost or carrying value of property to applicant and now owned by it over the original cost of such property when first devoted to public use (b) discount, premium and expense existing at March 31, 1940 on capital stocks not presently being amortized and (c) investments owned at December 31, 1939.

The provisions contained in the foregoing paragraph shall be subject to revocation in whole or in part by this Commission at any time upon its own motion or upon application of the applicant.

(5) That the Commission reserves jurisdiction to determine at a later date whether the fees to be paid to attorneys retained to represent Toledo Edison

Company in connection with the issue and sale of the aforementioned securities are or are not reasonable.

By the Commission.

[SEAL] FRANCIS P. BRASSOR,
Secretary.

[F. R. Doc. 40-1585; Filed, April 20, 1940;
11:05 a. m.]

*United States of America—Before the
Securities and Exchange Commission*

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 19th day of April 1940.

[File No. 1-925]

IN THE MATTER OF THE JOLIET AND CHICAGO
RAILROAD COMPANY, COMMON STOCK
(UNSTAMPED), \$100 PAR VALUE

ORDER GRANTING APPLICATION TO STRIKE
FROM LISTING AND REGISTRATION

The New York Stock Exchange, pursuant to section 12 (d) of the Securities Exchange Act of 1934, as amended, and Rule X-12D2-1 (b) promulgated thereunder, having made application to strike from listing and registration the Common Stock (Unstamped), \$100 Par Value, of The Joliet and Chicago Railroad Company; and

After appropriate notice, a hearing¹ having been held in this matter; and

The Commission having considered said application together with the evidence introduced at said hearing, and having due regard for the public interest and the protection of investors;

It is ordered, That said application be and the same is hereby granted, effective at the close of the trading session on April 29, 1940.

By the Commission.

[SEAL] FRANCIS P. BRASSOR,
Secretary.

[F. R. Doc. 40-1595; Filed, April 22, 1940;
11:16 a. m.]

*United States of America—Before the
Securities and Exchange Commission*

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 19th day of April, A. D. 1940.

[File No. 43-195]

IN THE MATTER OF PUBLIC SERVICE COM-
PANY OF COLORADO

ORDER GRANTING EXEMPTION

Public Service Company of Colorado, a subsidiary of Cities Service Power & Light Company, a registered holding company, having filed an application pursuant to Rule U-12C-1 of the Rules and Regulations under the Public Utility Holding Company Act of 1935 regarding the an-

nual acquisition of \$800,000 of its 4% Sinking Fund Debentures due 1949; a public hearing¹ after appropriate notice having been duly held thereon; the Commission having considered the record and having made and filed its findings herein;

It is ordered, That Public Service Company of Colorado be exempt from section 9 (a) of the Public Utility Holding Company Act of 1935 and Rule U-12C-1 promulgated thereunder with respect to the annual acquisition, through acceptance by the Trustee of tenders made for the sale of debentures as provided by the Sinking Fund Indenture of \$800,000 in principal amount per annum of its 4% Sinking Fund Debentures due 1949, subject however to the condition that acquisitions of such debentures shall be made for no other purpose than to meet the Sinking Fund requirements of the Sinking Fund Indenture.

It is further ordered that jurisdiction is reserved with respect to the application of the company regarding open market acquisitions of such debentures.

By the Commission.

FRANCIS P. BRASSOR,
Secretary.

[F. R. Doc. 40-1594; Filed, April 22, 1940;
11:16 a. m.]

*United States of America—Before the
Securities and Exchange Commission*

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 19th day of April, A. D. 1940.

[File No. 59-3]

IN THE MATTER OF ELECTRIC BOND AND
SHARE COMPANY AND ITS SUBSIDIARY
COMPANIES, RESPONDENTS

ORDER REGARDING APPLICATION FOR
POSTPONEMENT

The Commission having issued a Notice of and Order for Hearing in the within matter pursuant to Section 11 (b) (1) of the Public Utility Holding Company Act of 1935; said Notice of and Order for Hearing having required that the respondents herein file with the Secretary of the Commission on or before the 6th day of April 1940 their joint or several answers thereto; said respondents having filed on the 4th day of April 1940 their "Application with Respect to Notice of and Order for Hearing pursuant to Section 11 (b) (1) of the Public Utility Holding Company Act of 1935," requesting that the Commission postpone the time for filing said answers and also the date of hearing in the within matter until after final determination of a certain application filed by American Gas and Electric Company pursuant to Section 2 (a) (8) of the Act; and the Commission having on the 6th day of April 1940 issued an order extending

the time for filing answers until the 20th day of April 1940 pending disposition of the application for postponement, and postponing the date of hearing until the twentieth day after the 20th day of April 1940; and

The Commission having duly considered said application for postponement and having filed its "memorandum opinion" in connection therewith;

It is ordered, (1) That the time for filing answers be, and the same hereby is, extended for one week until the 27th day of April 1940; (2) that in all other respects the application for postponement of the time for filing answers be, and the same hereby is, denied, without prejudice to any further application for reasonable postponement for good cause shown; (3) that the date of hearing be, and the same hereby is, postponed subject to further order of the Commission.

By the Commission.

[SEAL] FRANCIS P. BRASSOR,
Secretary.

[F. R. Doc. 40-1597; Filed, April 22, 1940;
11:16 a. m.]

*United States of America—Before the
Securities and Exchange Commission*

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 20th day of April, A. D. 1940.

[File No. 70-21]

IN THE MATTER OF INTERNATIONAL
UTILITIES CORPORATION

NOTICE OF AND ORDER FOR HEARING

An application pursuant to the Public Utility Holding Company Act of 1935, having been duly filed with this Commission by the above-named party;

It is ordered, That a hearing on such matter under the applicable provisions of said Act and the rules of the Commission thereunder be held on May 15, 1940, at ten o'clock in the forenoon of that day, at the Securities and Exchange Building, 1778 Pennsylvania Avenue NW., Washington, D. C. On such day the hearing-room clerk in room 1102 will advise as to the room where such hearing will be held. At such hearing, if in respect of any declaration, cause shall be shown why such declaration shall become effective.

It is further ordered, That Willis E. Monty or any other officer or officers of the Commission designated by it for that purpose shall preside at the hearings in such matter. The officer so designated to preside at any such hearing is hereby authorized to exercise all powers granted to the Commission under section 18 (c) of said Act and to a trial examiner under the Commission's Rules of Practice.

Notice of such hearing is hereby given to such declarant or applicant and to any other person whose participation in such proceeding may be in the public interest or for the protection of investors

¹ 5 F.R. 982.

¹ 5 F.R. 1429.

or consumers. It is requested that any person desiring to be heard or to be admitted as a party to such proceeding shall file a notice to that effect with the Commission on or before May 10, 1940.

The matter concerned herewith is in regard to an application by International Utilities Corporation, a registered hold-

ing company, for approval of the purchase from time to time at current prices in the over-the-counter market in New York and/or in the open market in Canada of a principal amount not exceeding \$250,000 of the First Lien and Collateral Gold Bonds 6½% Series due July 1, 1945 of its subsidiary, Dominion Gas and Elec-

tric Company. The applicant has designated Section 10 (a) (1) of the Act as applicable to the above transaction.

By the Commission.

[SEAL]

FRANCIS P. BRASSOR,
Secretary.

[F. R. Doc. 40-1596; Filed, April 22, 1940;
11:16 a. m.]

